Volume VIII, No. 11 November, 1932

66

SOAP

JOHN CRERAR
NOV 18 1932
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Insecticide & Disinfectant Section

Published by MACNAIR-DORLAND COMPANY, INC., 136 Liberty Street, New York

Essential Oils and Perfume Materials
OIL KANANGA, JAVA
OIL PATCHOULY, SINGAPORE
OIL LAVENDER FLEURS
PRESENT conditions warrant the purchase *now* of these important oils for soap perfuming . . . We are in excellent position to meet your requirements satisfactorily . . . Buy from headquarters . . . Our prices are most attractive . . . Let us submit samples.
UNGERER & COMPANY
NEW YORK

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HERE'S THE PERFECT WAX for rubber, asphalt, tile, terrazzo, mastic, cork and hardwood floors! The new, improved Falcon Non-Buffing Liquid Wax cannot injure your costly floors because it is strictly a water-wax emulsion, containing no solvents whatsoever! It dries quickly with a real sheen, without polishing. That saves labor. Just apply it with a clean lamb's wool mop--and presto!--it's a new floor.

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Eagle Soap Corporation
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EAGLE SOAP CORPORATION,
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____Have your representative call on us and explain your complete line of floor treatments.

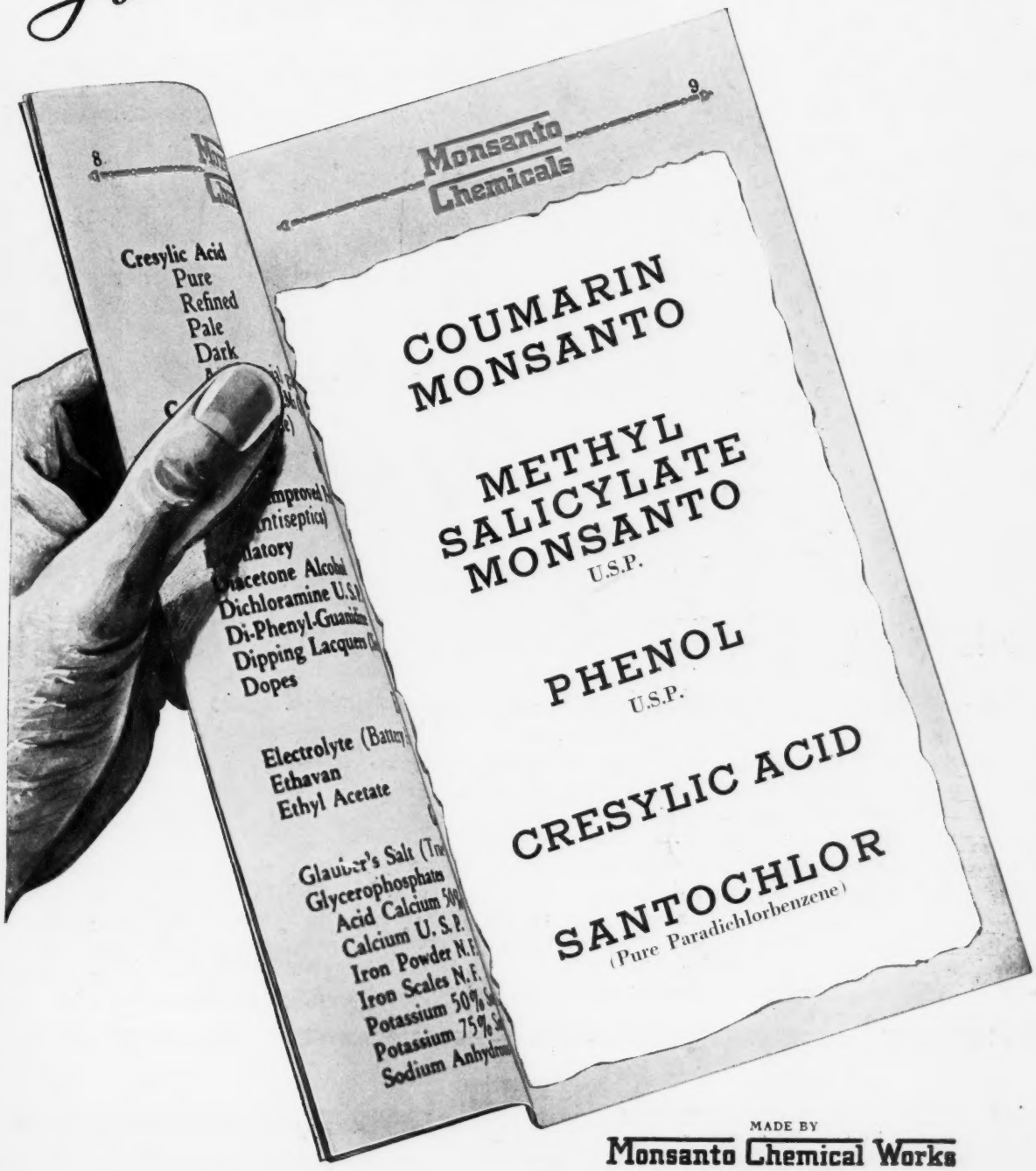
Name_____

Address_____

City_____ State_____

FALCON
NON-BUFFING LIQUID WAX

For SOAPS *and* SANITARY SPECIALTIES



The true aroma, purity and excellent rate of solubility of *Coumarin Monsanto* give it preference among discriminating buyers.

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ST. LOUIS, U.S.A.

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These du Pont crystals will not discolor and are absolutely stable. They are an excellent fixative. And embody the clear, fresh odor note of the rose in a pure white crystalline form. Yet with all these outstanding features, Benzophenone Crystals are priced well within the cost range of any toilet or liquid soap formulae. They are characterized by their high boiling point.

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The uniformity, freedom from any sharp by-odors and its delicate rose-like odor are the distinguishing features of this du Pont Aromatic. The most highly skilled technical direction and improved processes of manufacture insure its chemical purity.

CITRAL

It is water-white and free from Methyl Heptenone. And like other du Pont Aromatics added refinement in its manufacture plus complete laboratory control adds value to *your* product.

HAVE COMPLETE LABORATORY CONTROL OF YOUR FORMULAE—USE DU PONT AROMATICS. MAIL COUPON FOR SAMPLES

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E. I. DU PONT DE NEMOURS & COMPANY, INC.
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Gentlemen. PLEASE SEND ME SAMPLES of your_____ I want to test them for myself. It is understood this does not obligate me in any way.

*Name*_____

*Address*_____

*City*_____ *State*_____

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SOAP

Reg. U. S. Patent Office

with which are included

Insecticide & Disinfectant Section **Production Section**

Volume VIII November, 1932 Number 11

«

INSECTICIDE and Disinfectant Section, which is included as a department of every issue of SOAP, begins on page 69. Oil, Fat & Soap Production Section begins on page 59. These sections contain news, articles and editorial opinion of particular interest to their respective industries.

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Dow Caustic Soda

Solid, Flake and Liquid

DOW PRODUCTS INCLUDE

Coumarin, Paradow (Pure Paradichlorbenzene), Methyl Salicylate, Methyl Anthranilate, Phenol, U. S. P., Organic Solvents.

The use of Dow Caustic Soda in any of its many applications insures good results. Soap manufacturers can depend upon its dependable high quality.

Dow Caustic Soda is manufactured in volume in flake, solid and liquid form. The Dow Chemical Company will serve you well, both in furnishing a uniform, dependable product, and as a reliable source of supply.

Let us quote on your requirements.

TRADE DOW MARK

THE DOW CHEMICAL COMPANY . . MIDLAND, MICHIGAN

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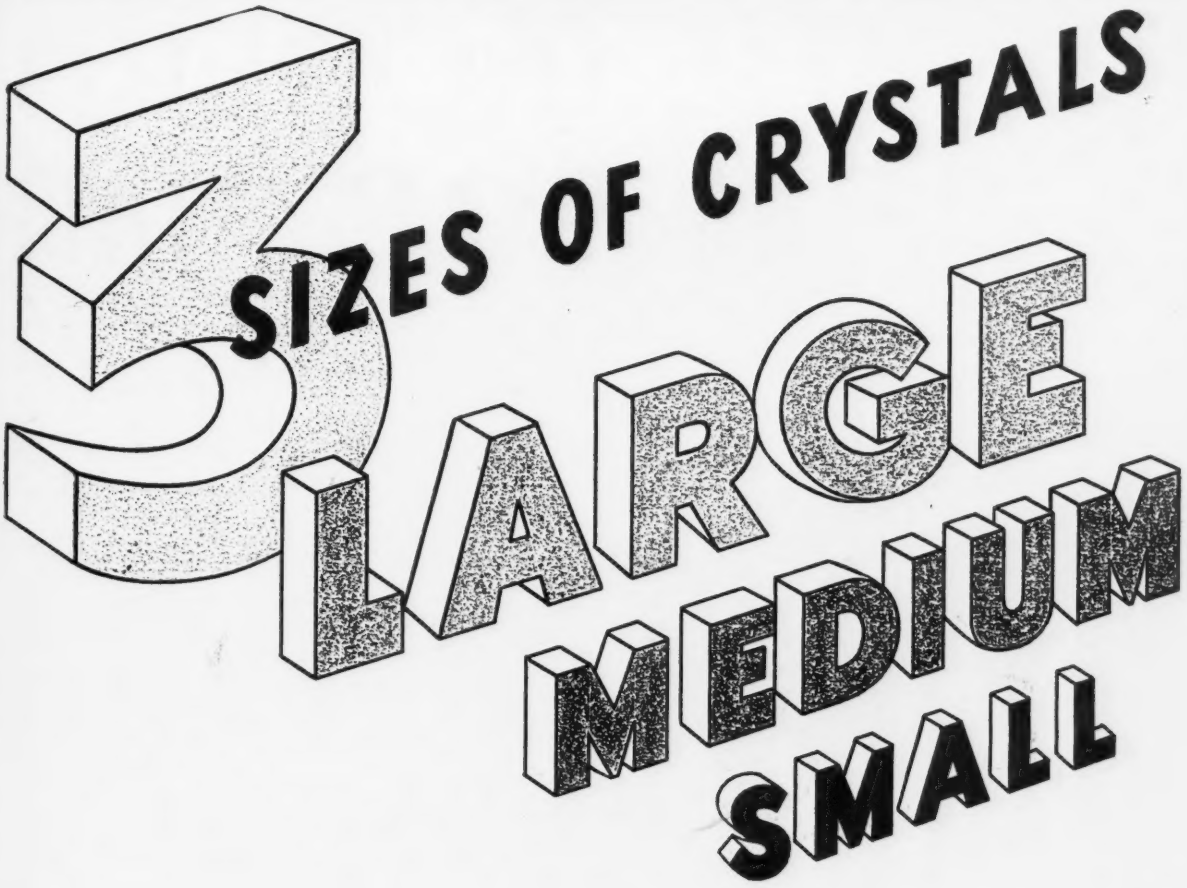

. . . *make* DU PONT PARA-DICHLOROBENZENE *easy to fabricate*

But that's just one feature of du Pont Para-dichlorobenzene. Others are:

1. It is absolutely dependable as to uniformity and purity.

2. It is available for immediate delivery anywhere.

3. It is backed by the name DU PONT.

4. It may be had in 5 different quantity sizes—200, 150, 100-lb. drums or 50 and 25-lb. pails.

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SEND THIS COUPON FOR SAMPLES AND PRICES OF DU PONT PARA-DICHLOROBENZENE

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Organic Chemicals Department
Wilmington, Delaware

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Organic Chemicals Dept., Wilmington, Del.
Gentlemen: Please let me have samples and prices of du Pont Para-dichlorobenzene by return mail.

Name_____

Address_____

My Business is_____

City_____ State_____

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LO! THE MODERN SALESMAN

● Persistent booster of your product! . . prepared to join good showmanship with honest value . . making the sales grade every business hour. ● Dealer interest is sharpened by a smart, colorful Package display . . knowing that it brings a self-sold consuming trade up to the counter from the windows and about the store. ● Let's exchange CONTAINER ideas! . . the designing or restyling of your product in terms of leadership! Plain CANS only, if you prefer.

METAL PACKAGE CORPORATION

110 E. 42nd ST., NEW YORK CITY

ESTABLISHED 1909

SALES OFFICES AND PLANTS • NEW YORK CITY • BALTIMORE • BROOKLYN • CHICAGO

THE FISCHER CAN COMPANY DIVISION • HAMILTON • OHIO

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ALBERT VERLEY
INCORPORATED

GERANIUM ARTIFICIAL GERANIOLS

for Soap Perfume

With the market for natural geranium oil in its present unsettled condition, the above products should be seriously considered by the soap manufacturer. Both work excellently in soap and will provide the geranium note at a cost which will be reasonable and at the same time stable. May we submit generous working samples?

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In our laboratories, we have facilities for manufacturing a complete line of compounds for soaps of all kinds, theatre sprays, para products, polishes, fly sprays, etc. Besides our standard perfume specialties, we can make up individual odors to suit your needs. It will cost you nothing to investigate the possibilities of these products. What are your problems?

SOAP SPECIALTIES
By Tombarel, Grasse, France

Resinoids

Tombarel Freres produce a complete line of resinolds, all very interesting bodies for soap perfume. Resinolds not only give character to soap odors, but also act as fixatives.

Lavender, Absolute
Oil Vetivert
Oil Geranium

also headquarters for

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Telephone—TRinity 6894

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CHICAGO
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114 East 25th St.
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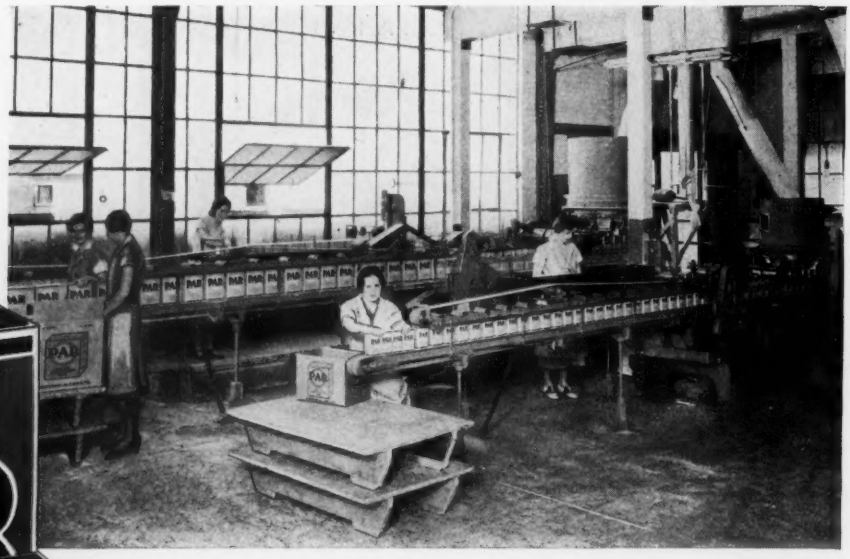
The "Par" filling record

of Two S & S Filling Machines is 60 8-oz. and 54 2½-lb. Packages per Minute

A Total of Over 37 Tons per Day!



AT the plant or Gordon-Allen Ltd., Oakland, California, two S & S Automatic Carton Filling and Sealing Machines are used to Package "Par", a well-known soap powder. Many packaging experts believe these machines are doing a distinguished job.

One fills and seals an 8-oz. package of "Par" at the rate of sixty cartons per minute. The other fills and seals a 2 lb., 8 oz. carton at the surprising rate of fifty-four packages per minute!

Despite their uncanny speed, neither of these machines allows a variation in weight of more than ⅛ oz. and every carton is *cleanly* filled, without spillage and needless waste. From feeding to sealing the operation is entirely automatic.

The S & S Fillers used for packaging "Par" are one of many styles of Stokes & Smith Fillers carefully engineered for many different purposes and time-tried in many different plants with hundreds of different materials.

STOKES & SMITH Co

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BOX MAKING MACHINERY
4915 Summerdale Ave., Philadelphia, Pa.

★ For economy and success, send your filling problems to S & S

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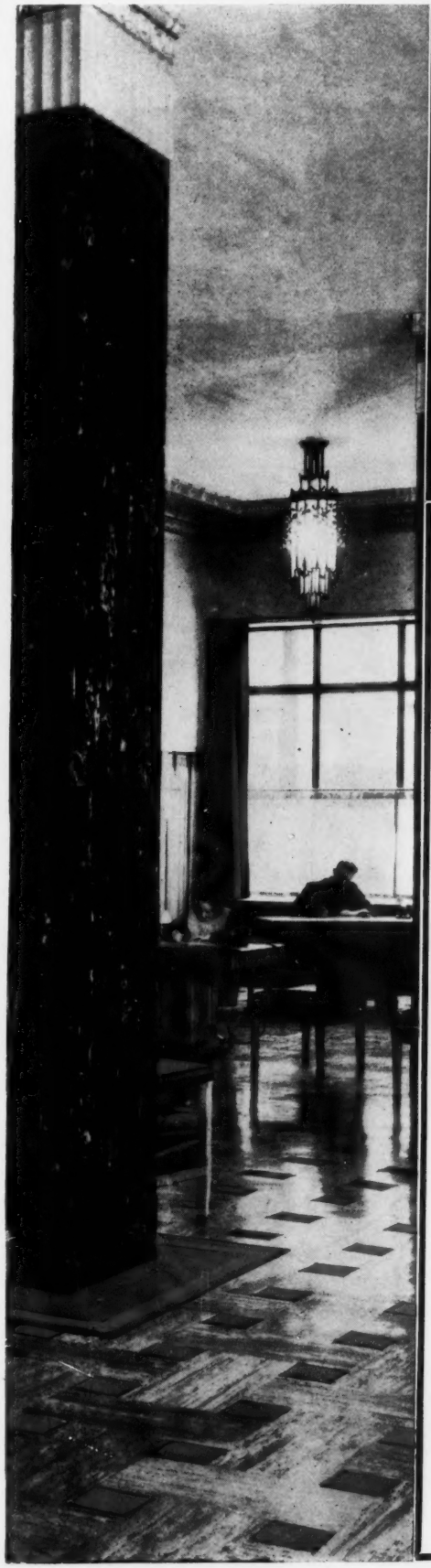

"BEAMAX"

DRIES TO A LUSTRE

LIQUID WAX

Does Not Require Polishing

"BEAMAX" cuts floor maintenance costs by saving labor—no buffing is necessary on application, and no polishing is required.

"BEAMAX" is easily applied with a cotton mop or lamb's wool applicator. It smooths itself. It dries to a hard, lustrous finish in twenty minutes or less.

"BEAMAX" is long wearing. Finish is easily maintained by buffing; each cleaning increases the lustre. Floors can be washed with clear water without affecting the finish.

"BEAMAX" is recommended for all types of floors—this one wax takes care of linoleum, wood, tile, terrazzo, rubber, asphalt tile, mastic, etc.

"BEAMAX" will not show lap marks when used for "patching" worn spots. It has no odor.

"BEAMAX" is sold in drums, half-drums, and quarter-drums, as well as in 10-gal., 5-gal., and 1-gal. cans. It is a perfect emulsion and will not settle out.

Try "BEAMAX" for yourself. Send coupon for sample and prices.

THE DAVIES-YOUNG SOAP COMPANY

Dayton, Ohio

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The Davies-Young Soap Co.
Dayton, Ohio

Please send me without charge sample can of "BEAMAX" Dries to a Lustre LIQUID WAX.

Name .....

Address .....

City .....

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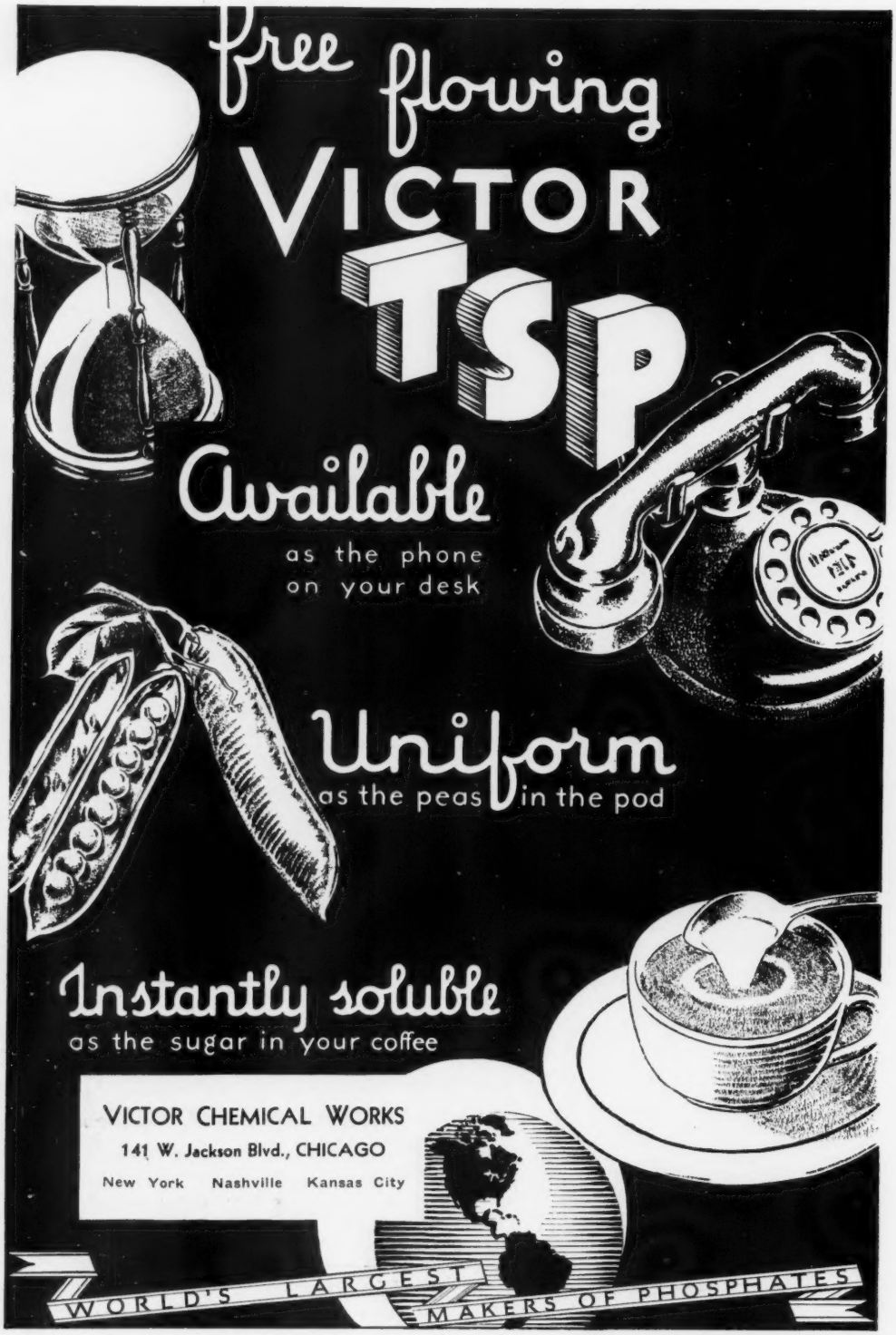

Say you saw it in SOAP!

There are three things a closure should do ★ Anchor Amerseal does them all perfectly

ANCHOR CLOSURES GLORIFY & PROTECT YOUR PRODUCT

REMOVES EASILY

•

The few points at which the lugs of the Anchor Amerseal Cap grip the container finish, plus the fact that such contact is on the under side of the glass threads, is the answer to its easy removal under even adverse conditions. This unique construction permits even a moderate force to loosen the cap. Syrups or products that are inclined to cake or gum up the container top have no effect on the ease of removing an Anchor Amerseal. Just a simple, easy quarter-turn removes or reseals it.

LOOKS ATTRACTIVE

•

It is a substantial neat appearing cap, this Anchor Amerseal, a credit to a quality product. It looks the part of a well made, businesslike closure, with its attractive knurling and cleanly rolled wire edges. Supplied in the standard gold lacquer finish or in a variety of colors. May also be coated or specially lithographed in order to lend added sales appeal to the package.

Anchor Cap & Closure Corporation
Long Island City, N Y
Toronto, Ontario
Branches in all Principal Cities

SEALS EFFECTIVELY

•

Sturdy, evenly spaced lugs draw the cap down snugly and uniformly around the entire 360° of the top of the container finish. The scientific design of the lugs insures a positive, non-slipping grip so that caps will not loosen or back off. Even oily products have no chance to ooze out, nor highly volatile products to evaporate. This is just as true in *re-sealing*, where an airtight, leak-proof seal is equally as important and as influencing on consumers' opinions.

ANCHOR IS CLOSURE HEADQUARTERS

Say you saw it in SOAP!

SPECIALIZED -

Of course all industries have their general requirements, which are automatically taken care of. But when it comes to specific questions . . . those problems which are peculiar to your own business . . . only an organization which knows *from experience* can give you a service which is complete.

American Cyanamid & Chemical Corporation can do this, because it is a union of formerly independent companies, recognized as experts in their fields. You get, from these "departments" of a strong parent company, that specialized attention which makes your purchasing task easier and better.

Alkalis	Sodium Silicate
Carbonate of Potash	Tri Sodium Phosphate
Caustic Potash	Zinc Oxide
Cresylic Acid	Zinc Stearate

AMERICAN CYANAMID & CHEMICAL CORPORATION

535 FIFTH AVENUE, NEW YORK

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THE FIRST, AND STILL THE FIRST

Niagara

CAUSTIC POTASH

Niagara Alkali Company was the first, in this country, to manufacture Caustic Potash. Our many years of development, experience and increasingly expert control have produced a grade of potash which is the finest obtainable here or abroad.

Caustic Potash is difficult to produce in a pure state. For a safe, consistently excellent quality, specify *Niagara.*

NIAGARA ALKALI COMPANY

Associated with Electro Bleaching Gas Co.
Pioneer Manufacturer of Liquid Chlorine

9 East 41st Street, New York, N. Y.

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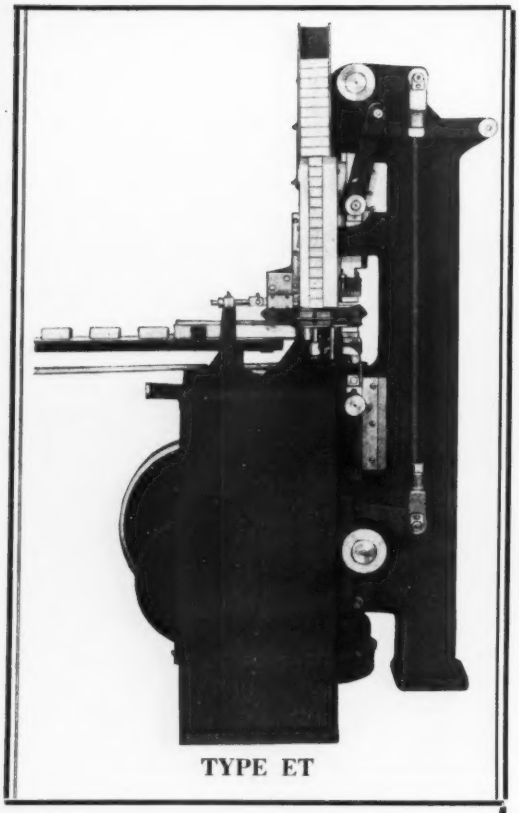

TYPE ET

◆

Brine and other lubricants discolor soap cakes. On most soaps, the Jones Toggle Press requires no pressing lubricant. Result: *No discoloration of cakes.*

◆

"WORN DIES CAN'T DO GOOD PRESSING"

◆

THE Jones toggle presses conserve the life of dies, thereby doing better pressing and saving die makers' bills for new dies and repairing old ones.

A WORN geneva ruins dies. The geneva on the Jones Toggle Press runs in an oil chamber, avoiding its wear by constant, perfect lubrication and entirely preventing wear from gritty dust and other substances.

THE press is specially designed to bring the die box and dies into perfect relation so they do not wear. Complete absence of vibration also removes a source of die wear.

JONES new toggle operated presses more than *treble* the productive life of dies.

For DIE ECONOMY,
BETTER LOOKING,
MORE SALABLE SOAP

replace your old presses with

JONES NEW TOGGLE PRESSES

◆ ◆ ◆

R. A. JONES & COMPANY, Inc.

P. O. Box 485 Cincinnati, Ohio

Makers of the Standardized Multiple Inserting CONSTANT MOTION CARTONER, the Standard Cartoning Machine of the world.

Say you saw it in SOAP!

SOAP

Volume Eight Number Eleven

Soap Sales Sanity

IF we may judge by statements of the larger soap companies and less comprehensive reports from some of the smaller soap firms, the third quarter of 1932 marked a slight upturn in production, sales, and profits. This improvement, while it is not sufficient to engender any great volume of cheers, at least may mark a turn after a year of steadily declining volume, prices, and profits. Some of the sore spots in the soap industry appear to be healing up. We have not heard as much about the knife-edge competition which made the early part of 1932 a nightmare for sales managers. A few weird merchandising ideas that played havoc for a time, seem to be attracting less attention. Although soap selling has not as yet taken on the atmosphere of an afternoon tea, the wild scramble for any order at any price seems to have subsided somewhat. We hope that the tactics of the past year are definitely past and that there has been an actual return to complete sanity in soap sales.

—o—

"When, in your opinion, is the most opportune time to advertise?" The Campbell Soup Company, one of the world's great advertisers, have been asked this question many times. They answered it in the September issue of their dealers' magazine in this way. "It is our experience that liberal advertising should be used when conditions are favorable,—and also when they are not." That is apparently the advertising formula for most successful organizations. Financial statements clearly show that companies which either maintained or increased their advertising budgets in the 1920 debacle enjoyed considerably larger earnings in the subsequent good years than did some of their competitors who took to the "tall timbers" while the going was rough.

—o—

Now it is "Dumping"

A CONCERTED action, headed by the National Dairy Union and backed by a number of other large so-called farm organizations, is being made to call into play the anti-dumping section of the Tariff Law to bar from the American market foreign oils and fats which compete with American produced fats. The fact that the great bulk of these imports are not competitive with American oils and fats, are not edible, and go chiefly into the soap kettle seems to make no difference to the "farm" organizations. Whether this is a serious attempt or the gesture of a lobbyist playing to the membership of his organizations, we do not know. It could be

either. At any rate, to anybody who is at all familiar with the anti-dumping law, it is obvious that it does not apply to oils and fats as they have been and are being imported into the United States. The fact that prices sank to unprecedented depths does not in itself mean that oils and fats shipped into this country at the low levels have been dumped.

—o—

The Economy Fetish

LIKE knitting woolen socks during the war,—when we all had six pair of hand-knit hose to every pack of cigarettes,—economy bids fair to become a national fetish. Economy has become fashionable. The best people are economizing. Some are doing so because they have to; others because everybody else is doing it. Under the guise of economy, many ill-considered reductions in expenditures are being made which are not only unnecessary but positively ludicrous. That this wave of economy is doing as much as anything else to hold back a return of normal conditions, is obvious. As was pointed out in a recent address by Henry L. Doherty, it is defeating the very purpose for which it is practised.

We most certainly do not propose a return to a wild orgy of spending, but we do believe that common sense expenditures where needed, and where the money is available, should be made. We do not believe that the world is coming to an end just yet. And if it does that cash-on-hand will not be worth much any way. If your plant is limping along with an old worn-out machine here or there, buy the new one. You will never buy it to better advantage, and a year or so hence, you will be glad that you bought it. Don't let economy become a fetish in your business.

—o—

The Five Day Week

THE extent to which the soap industry is operating on a five-day week, and in some cases even a shorter week, in order to give employment to a greater number of persons in the face of reduced production, is revealed by figures issued recently from the office of Roscoe C. Edlund, manager of the Association of American Soap and Glycerine Producers. Mr. Edlund points out that about 85 per cent of the production facilities of the American soap industry are now running on a five-day basis or less.

Every effort to spread out available employment is to be commended. Of course, there are limitations to spreading out the work in a soap plant. The smaller the plant, the greater the difficulty owing to the lesser flexibility of a small staff of employes. There are also the technical difficulties which may be encountered in operation. A soap plant cannot be locked up like a cigar store on Friday night and left unattended until Monday morning. The production week in many cases continues to be a seven-day week, although no workman may be employed more than five of the seven days. From this angle, the troubles of the small plant in adhering to a shortened labor week are obvious.

The tendency to retain the services of good men full time and to dispense altogether with less efficient men is only natural among manufacturers when they are forced to cut employment. In the larger plants, this tendency is easier to restrict. In the smaller factory, it sometimes arises from the very necessity of self-preservation in times of stress, and is difficult to control. Be that as it may, the cooperation of every manufacturer in spreading out the work to as great an extent as possible is the most practical method of reducing unemployment quickly. It is for each manufacturer to adjust employment as the needs of his plant will best permit.

—o—

"There's profit in selling cheap things, but no profit in buying them, if you can afford something better. Most of us are fortunate that we are so often the victim of good salesmen. When they sell us their best stock, they give us the bargains." This philosophy of price and quality comes from the pen of the editor of a house organ of a well-known Baltimore firm. He goes on to conclude: "The sweetness of low prices never equals the bitterness of poor quality." How true every word of this is, and yet, day after day, all of us will in some way or other flirt with trouble in the form of cheap goods. It seems to be a human failing to strive forever to get something for nothing. In this respect, experience has been a dear teacher, but a poor one.

Lavender plantations no longer flourish on the French hillsides. Picture the well-kept lavender field of a few years ago standing neglected today. View near Barreme, with the town in the background

Lavender Production

BY DR. ERNEST S. GUENTHER

Chief Research Chemist

Fritzsche Brothers, Inc.

Will a scarcity result from a shut-down of the modern distilleries, which leaves the French farmer-distiller as sole producer?

THE present economic crisis has not remained without far-reaching influence upon the lavender oil industry of Southern France. Prices of oil of lavender steadily climbing in the years following the war, reached abnormally high levels in 1925 and finally broke in 1928. Falling ever since, they have arrived at the present lows which make it practically prohibitive for the large scale producer to carry on distillation of oil.

Large lavender distilleries equipped with all facilities of modern steam distillation remained closed during the last lavender harvest and the greater part of the oil was again produced, as it was in days of old, by the small farmer-distillers. As a complete reversal in industrial evolution, from primitive farmer-distillation up to large scale production in modern plants, and back again to individual small farmer-distillation, the story of this rather surprising course and its probable effect upon the American consumer affords cause for thought and reflection.

Is the example of oil of lavender characteristic of a similar trend in the essential oil industry in general, or is it only an isolated case liable to rearrange itself with an upturn in the economic situation? To answer this question we must go into the whole problem of cultivation and distillation of lavender starting with a brief review of its historical development.

The story of oil of lavender goes back for centuries. This delightful fragrance, native of sunny Provence, was in great favor on the Royal Courts of Europe. The little plant with its characteristically shaded flowers, sweet and delicate, yet refreshing and strong in perfume, grows

The beautiful mountain country in the lavender region of France near Castallane

spontaneously on the warm, sun-flooded mountain slopes of Southern France. It prefers loose, calcareous soil, easily drainable and has invaded those innumerable homesteads and farm lands of insufficient fertility which were abandoned years ago during the period of industrial developments by former inhabitants in the hope of greater and easier riches in urban centers.

Most luxuriantly, lavender grows along the roadsides near golden-yellow flowered broom-bushes, between rocks and on steep precipices, exposed to sun. During the period of bloom, end of July and beginning of August, the distant high mountain slopes in the setting sun often assume bluish hues of indescribable delicacy. It is a hardy little plant able to withstand the terrifically cold winter storms which rage over the high snow-covered mountains; it develops best after heavy rainfalls in spring and ample sunshine in summer.

There are several botanical varieties of lavender, each giving a different quality of oil and standing in direct relation to the altitude of their natural habitat. The lower regions of the Departments of Alpes-Maritimes, Var, Gard, and Bouches Du Rhone, particularly also the lower valleys such as the valley of La Durance, produce *Lavendula Spica* or spike plants (aspic) yielding an oil of comparatively coarse and camphorous odor. The higher mountain slopes, particularly in the Departments of Dôme Vaucluse and Basses-Alpes, grow *Lavendula Vera Fragrance*, and the highest altitudes, especially in the vicinity of Barrême, bloom with *Lavendula Vera Delphinensis* developing the finest oil. Of course, intermediary varieties occur, their quality of perfume depending upon the prevalence of the parent plants.

A hybrid between *Lavendula Vera* and *Lavendula Spica* called lavandin has of late enjoyed particular popularity because it is low priced and produces a comparatively good oil. The wide range of botanical varieties is the principal reason for the various qualities of lavender oils produced in France and offered on the market.

UNTIL about thirty years ago, all the oil of lavender was produced in migratory direct fire stills distributed over the producing regions. Situated near a center of sufficient flower supply and near a small spring or a little brook for the necessary distillation water. the small stills were operated by farmers to whom the production of a small quantity of oil offered a welcome additional income between the labors of their regular harvest of cereal. It was rather a primitive and picturesque industry and offered an interesting sight to the visitor traveling through the interior of the mountains of Southern France.

The wild flowers growing on the hillsides and along the roads were cut, brought to the nearest still, and submitted to distillation. A charge consisted of about 50 kilos of flowers and an equal amount of water. Wood cut from nearby forests served to supply the fire beneath the still and distillation lasted for about an hour. If the necessary precaution was taken to avoid any burning of the plant material along the heated copper walls of the stills, or insufficient cooling in the condenser, the oil thus obtained was by no means of inferior quality. Of course, it was deficient in ester content, the calcareous boiling

A well-kept plantation of lavendin. These, with other lavender plantations, are gradually disappearing from the French countryside

View of the distillation equipment of one of the factories near Barreme, now closed down

water in the still saponifying parts of the natural linalyl acetate content of the oil.

Such considerations, however, at that time did not as yet enter into the picture since practically nothing was known about the chemical constitution of oil of lavender. The oils were judged by nose test only, by their perfume which depended entirely upon the region, i.e., altitude and quality of the plant material, and to a certain extent, upon the skill and the care applied during distillation.

A new chapter in the story of oil of lavender opened with the far-reaching scientific discoveries of Wallach and his pupils, on terpenes and the constitution of essential oils in general. The years of 1892 to 1905 remain outstanding in the history of the entire essential oil industry. Discovery followed by discovery, one oil after another was analyzed and the constituents determined. It was an Elizabethan age of enlightenment and progress from which the essential oil industry and the industry of synthetic aromatics still reaps the benefits, even today.

It remained for two chemists of Schimmel & Company, Dr. Bertram and Dr. Walbaum, to demonstrate the chemistry of oil of lavender in a series of very valuable classical publications. Bertram and Walbaum showed that oil of lavender consisted to the greater part of linalyl acetate and linalool, the former of which is liable to be easily saponified by the influence of boiling water. Theoretical reflections led to the conclusion that in order to increase the ester content of oil of lavender, the plant material during distillation should not be left in contact with boiling water. It seemed logical that a higher ester content could be obtained by keeping the plants in the stills above a false bottom through which steam, originating, possibly in a separate steam boiler, might enter and carry over the oil in a minimum of time.

These considerations induced Schimmel & Company to go right into the producing regions and erect a modern steam distillation plant to serve not only for experimental purposes, but also for large scale manufacture of lavender. Barrême, a little village in the Basses-Alpes was selected as a center promising a rich supply of the best flower material growing on the surrounding high mountains. Soon it was possible to show that by proper distillation oils of 55% ester content and in a few instances even of 60% linalyl acetate could be obtained from very good flower material originating from highest altitudes.

The penetration of a foreign house right into the so-far unchallenged sanctuary of the French essential oil industry remained, of course, not without comment and friction. Yet, the truth of the scientific findings could not be challenged and slowly but surely the new methods of distillation found followers among the French producers.

At about the same time, the analytical laboratories of Schimmel also came out with most interesting findings. An efficient method of analyzing oil of lavender was developed to determine quality and purity of the oil by a number of tests which even today are considered standard methods of identifying in oil of lavender all kinds of adulteration, particularly of sophistication by the addition of foreign esters. The new analysis was based upon determination of the natural ester (linalyl acetate) percentage which was found to stay in direct relation to the quality of the flowers, i.e., to the altitude of their origin and also to the method of distillation.

It could be shown that oils from plants of lower altitudes contained only about 30% esters and even less (particularly in the case of hybrid plants with Lavendula Spica) whereas oils from plants of the highest altitudes range up to 55% ester content. Incidentally, it was clearly demonstrated that the same quality of plants distilled according to modern methods with direct steam showed an increase of approximately 10% esters as compared with the same plant material distilled in an old-fashioned open fire still holding flowers and boiling water in direct contact.

For a long time, the new evaluation of oil of lavender by ester determination remained a question of heated controversy. Old lavender experts claimed that the quality and particularly the delicacy of the perfume of oil of lavender was not improved by rapid high pressure

Harvesting the full blooming plantation lavender near Barreme before the lavender distilleries were forced to close by low prices for the oil

The flowers were transported to the central modern distillery. Original Schimmel plant in Barreme, established prior to the war

steam distillation. On the contrary, they were of the opinion that steam distillation was connected with some disadvantage as, for instance, lowered solubility of the oil. The discussion remained open for a long time but Schimmel's authority based upon other scientific findings finally led the essential oil industry to the adoption of the evaluation of oil of lavender by ester content and the oils soon appeared in the price lists arranged according to their percentage of linalyl acetate.

The method made it possible for the foreign buyer to analyze and determine quality of oil of lavender by clear chemical means without depending wholly upon the nose test which is really reliable only to the real native connoisseur of oil of lavender. It is too unfortunate that this very test was later taken advantage of by the scientific adulterator. By adding cheap grades of synthetic linalyl acetate, a higher ester content is fraudulently obtained and since this manipulation cannot be proven by chemical analysis, we must again resort to a skilled nose as well as to the analysis.

More and more the new methods of distillation spread among the farmer-distillers in all lavender producing centers. Any lavender oil expert will, now that the smoke of the battle has cleared away, agree to the fact that Schimmel's pioneer work has given a tremendous impetus to the development of the whole lavender oil industry in Southern France. The first visible result was a general improvement in the distillation apparatus throughout the whole region. Migratory direct fire-stills were equipped with false bottoms above which the flowers were packed without coming in contact with the water boiling below. This feature alone increases the ester content of an oil of lavender by about 5%, as compared with the old-fashioned distillation of boiling the flowers in water.

Aside from this improvement many new types of migratory stills were constructed among them, for instance, small stills mounted on carriages and migratory stills with separate steam boilers which could easily be transported into the mountains where flower supply was ample and nearby.

At the same time a decided improvement toward large scale factory distillation set in. The idea first developed by Schimmel was soon followed by French manufacturers and particularly the houses of Grasse took up the challenge. The outbreaking war eliminated Schimmel from the producing centers in Southern France with the sequestration of their modern factory in Barrême. Yet, all the years of intelligent work had not remained without fruitful results. Production of oil of lavender had been elevated to the rank of a regular industry. The years after the war saw much work along the lines of further improvement in the distillation methods.

In Barrême, headquarters for the highest grade of oil of lavender, other distillation plants sprang up and soon this village in the Basses-Alpes boasted over a half-dozen

The farmer-distiller and his primitive equipment works with lavender flowers from near-by hillsides

good size lavender distilleries. This trend toward factory production remained by no means confined to Barrême. Modern distillation plants capable of handling daily large quantities of flowers, were constructed in other sections of the lavender region, particularly in the Departments of Drôme and Vaucluse.

This is the first part of an article on lavender production in France written especially for "Soap" by Dr. Guenther, well-known authority on perfuming materials, after a six months study of conditions in the essential oil producing regions of Europe and North Africa. The second and concluding part of the article will appear in the December issue of "Soap."—THE EDITORS.

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Johnson Automatic Sealer Co., a division of Battle Creek Wrapping Machine Co., has just started production of a new heavy-duty combination top and bottom sealing machine for carton sealing. The machine is fitted to handle 20 to 25 cartons per minute. Only one operator is required to feed cartons on forms.

—o—

British exports of toilet and shaving soaps showed a substantial increase in the first six months of 1932, totaling 3,936,000 lbs., or 379,000 lbs. more than the total for the corresponding period of 1931. The value however was $274,000 less, totaling only $828,000.

Improved Anti-Freeze Glycerine

Producers Offer New Leak-Proof Product at Lower Price This Year—Alcohol Prices To Be Higher

WITH cold weather close at hand, producers are looking forward this year to a considerable expansion in the sale of glycerine in the anti-freeze field. Glycerine for anti-freeze use will be less expensive this year, and it is expected that alcohol, its chief competitor in this market, will be priced higher than it was a year ago when the alcohol market was badly demoralized. It is expected that this narrowing of the price differential between the two anti-freeze products will result in a considerable expansion in glycerine sales this winter.

The list price of anti-freeze glycerine last year averaged about $2.50 a gallon, although where competition was strong, prices as low as $2.10 to $2.25 a gallon were common. Due to the price war among alcohol producers last year, the retail price of alcohol was cut as low as 50c a gallon. This year, alcohol prices are distinctly higher, and it is expected that service stations will have to advance prices to a basis of 80c or 90c a gallon. Glycerine, on the other hand, has been reduced in price, and the average cost to users will be about $1.75 to $1.95 a gallon. Producers expect that the lower price will make glycerine attractive to car operators who have hesitated over the considerably higher initial expense in past years.

Another development which is expected to pave the way to increased use of glycerine in the anti-freeze trade this year is an improvement in the product, by increasing surface tension, which is said to make it more leak-proof than water. Repeated laboratory and road tests on many different makes of cars show that the improved glycerine anti-freeze has less tendency to leak than plain tap water when used in a water-tight cooling system. A second improvement is the development of a product which actually protects the cooling system, retarding rusting and corrosion caused by water, and cutting down the disintegration of rubber hose connections. Difficulties of overheating, clogging and gumming of radiators have also been overcome.

There has been a steady expansion in the sale of glycerine to the anti-freeze trade over the past five years, in spite of the fact that the last few years winters have been rather mild, and the sale of anti-freeze preparations generally smaller. In persuading users to pay the greater initial cost necessary in the use of glycerine, an extensive educational and promotional campaign has been necessary, and it is only now that the cumulative results of the work done over the past few years is becoming apparent. Even without the lower price and the improved product, a larger sale could normally be expected this year in any case, due to natural expansion in the use of a more efficient product for anti-freeze uses.

Last year some 1,600,000 cars of the 22,000,000 odd cars in the country were serviced with glycerine. Figuring on an average of seven quarts to a car, this would indicate a total volume of glycerine-base anti-freeze sold to the automotive trade of about 2,800,000 gallons. This would indicate a consumption of roughly 16,800,000 pounds of glycerine. The lower price, improved features and growing demand cause producers to predict a substantially larger consumption by the anti-freeze trade this year. Much of the glycerine sold to this trade bears the brand of the Glycerine Producers' Association and is sold as "G.P.A." radiator glycerine. Estimates of the extent of the market supplied with the "G.P.A." product range from 50 per cent to 70 per cent. Other than alcohol, the chief competitor in the anti-freeze market is ethylene glycol.

The sales program of the Glycerine Producers' Association for this fall and winter includes a daily series of broadcasts over 66 major radio stations. The broadcasts will include daily weather forecasts, and the sales messages will be built around the forecasts. The magazine advertising schedule includes the *Saturday Evening Post, Literary Digest, Country Gentleman, Collier's* and *Time*. In addition, signs, window posters, wall displays and other dealer helps will be furnished to all garages and service stations selling "G.P.A."

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Stanley Doggett, Inc., New York, has announced a new line of permanent reds for use in soap coloring, the new colors selling under the brand, "Permo Reds." Developed especially for soap work, they are said to be fast to light, and acid and alkali proof. The makers state that when used straight they are very brilliant, and that they can also be toned down to a wide range of pink or flesh shades.

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Imports of castile soap into United States during August, 1932, totaled 98,244 pounds worth $6,931, as against 38,103 pounds, priced at $2,640, during the same month of 1931. Imports of toilet soap were 68,610 pounds, worth $15,707, in August, 1932, as against 111,499 pounds, worth $31,651, in August 1931.

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Alfred W. Jenkins, senior partner of Parsons & Petit, died recently at Vichy, France, at the age of seventy. He had been with Parsons & Petit since 1877, and had been a partner in the firm since 1898.

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LES HESPERIDEES, Reggio, Italy MESSINA, Sicily

Sodium Cholate— As A Soap Improver

By Josef Augustin

Wiesbaden, Germany

Technical sodium cholate is a mixture of sodium salts of bile acids. It gives added detergency to soaps, prevents alkali injury to textiles, increases lather, and is a soap preservative. Its use in toilet and laundry soaps alone and in combination with sodium lauryl sulfonate, sodium naphthenate, and other products is recommended and discussed.

EXAMINATION of most soap substitutes shows that they differ considerably from soaps themselves. However, sodium cholate resembles the sodium salts of fatty acids more closely than the ordinary wetting agents of the sulfonic acid type. Cholic acid, like the fatty acids, is itself insoluble in water, but it is easily converted into the soluble state by treatment with alkalies to form cholates. Sodium hydroxide or potassium hydroxide do not have to be used for this purpose. Sodium carbonate, potassium carbonate, ammonia, triethanolamine and the like serve equally as well. Technical cholic acid consists of a mixture of glycocholic acid and taurocholic acid.* These acids can be separated only with the greatest difficulty. The mixture is entirely satisfactory for all practical purposes, and furthermore, it is cheaper than its constituents. Moreover, the component members of the mixture differ hardly at all in action and properties. This is to some extent like the mixture of palmitic and stearic acids, which comprises technical stearic acid.

One hundred parts of cholic acid require for neutralization approximately 13 parts by weight of potassium hydroxide or approximately 10 parts of sodium hydroxide or about 13 to 15 parts of sodium carbonate. The compound mostly used is sodium cholate. This is a brownish, bitter-tasting powder of relatively faint odor. Because of its marked hygroscopicity, the powder becomes lumpy when it is stored in containers that are not tightly sealed. Nevertheless, the balling of the powder has no bad effect on its solubility and activity. Cholic acid is quite different from sodium cholate. While it is likewise a brownish colored powder, nevertheless, it is not hygroscopic and does not agglomerate into lumps. Sodium cholate dissolves very easily in water. For example, 100 parts by weight of sodium cholate dissolve in 150 parts by weight of warm water. Care must be taken that it does not come into contact with water-soluble acid substances, which possess a stronger acid reaction than cholic acid. For like soap solutions, it is then decomposed with the liberation of free cholic acid. Solutions, which contain high concentrations of metallic salts, convert sodium cholate into the corresponding metallic cholates.

Sodium cholate differs from soap by the following properties: 1. It wets down the wash more easily. 2. Because of its enhanced emulsifying action, it dissolves grease and dirt without requiring the use of alkalies, thus avoiding the danger of their caustic action. 3. It increases the lathering quality of soaps, soap powders, washing powders. It has an exceedingly powerful action in this respect. 4. It protects the textile fiber as well as the skin against the harmful irritating action of washing agents containing sodium carbonate and oxygen. 5. It makes the wash white and soft and gives it a good "handle"; it makes the skin white and soft. 6. It effects its action in extraordinarily small quantities.

Due to these advantages, cholic acid should form a valuable substitute for oxgall in all preparations in which the latter has been used up to the present time. A certain amount of reluctance has been shown by manufacturers in using oxgall for these purposes. This has been due to its inconvenient properties, such as disagreeable odor, tendency to become putrid, marked color and irregular action. It has also been impossible, even when oxgall was used under correct conditions in making certain soaps, to obtain with them strikingly better results than with soap alone.

One hundred parts by weight of oxgall contain 10 parts by weight of dry substance, which contains only

* *Edit. Note*—Cholic acid is $C_{24}H_{40}O_5$, colorless crystals. Author refers to technical cholic acid of brown color as a mixture of taurocholic and glycocholic acids. The term "cholic acid" as used undoubtedly refers to an impure commercial mixture of bile acids. Taurocholic and glycocholic acids are given as follows:
Taurocholic acid ($C_{26}H_{45}NSO_7$)—Constituent of bile, decomposed by boiling with acids, yielding cholic acid ($C_{24}H_{40}O_5$) and taurine ($C_2H_7NSO_3$).—Kingzett, p. 719. 4th Edit.
Glycocholic Acid ($C_{26}H_{43}NO_6$)—A bile acid consisting of cholic acid ($C_{24}H_{40}O_5$) and glycocoll ($C_2H_5NO_2$).—Hackh Chem. Dict., pg. 334.

0.2 part by weight of sodium and potassium gallates (equivalent to cholates). Sodium gallate and potassium gallate are the sole active ingredients of the substance as far as washing and emulsifying power is concerned. The albuminous constituents of oxgall have only little effect. One part of thickened oxgall, in which form it is mostly used for the manufacture of oxgall soaps, consequently contains approximately 0.8 up to a maximum of one per cent of gallates. If it is assumed, that the thickened oxgall is seldom used in a proportion greater than 10 per cent in making oxgall soaps, then these soaps would contain only 0.1 per cent of gallic acid. Even though the content of the active principle in the oxgall soap is small, nevertheless there is still a sensible effect which can be properly ascribed to it. On the other hand, if only two per cent of the thickened oxgall or even only two per cent of the fresh oxgall is used, then this small amount of active principle in the soap will have no material effect.

A genuine oxgall soap must contain a sufficient proportion of actual gallates so that the protective and emulsifying action of the oxgall is recognized by the user in addition to the ordinary action of soap itself. A content of 0.1 to 0.2 per cent is the smallest quantity. When sodium cholate is employed in place of oxgall which contains useless and injurious secondary ingredients, then high grade oxgall type soaps can be made. Soaps of this character must be designated as "gall-extract soaps" in order to differentiate them from the oxgall soaps made by the old method.

Sodium Cholate Gives Oxgall Action

THE addition of two per cent sodium cholate gives to soaps the striking and much-desired oxgall action. More than ten per cent of sodium cholate should not, however, be incorporated with a solid soap. It is nevertheless possible to obtain good results by adding even more than this quantity to paste soaps. No difficulties are encountered in the manufacture of "gall-extract soaps." It is immaterial whether these soaps are produced by the cold process, the semi-boiled process, or whether curd soaps or milled soaps are used.

Care must be taken when the soap has been made by the cold process. The method of melting cholic acid in the fats, thereby forming sodium cholate as soon as the sodium hydroxide liquor is stirred in, sometimes results in too rapid emulsification, so that an unevenly saponified product is obtained. Fine soaps can be produced by this method only when the fats are practically free from free fatty acids and when the proportion of cholic acid is only one per cent of the weight of the fats. The time of mixing the soap batch is reduced almost half due to the emulsifying power of the sodium cholate formed within the soap mass.

If a greater content of sodium cholate in the finished soap is desired,—and an effort should always be made to attain this result inasmuch as the quality of the soap is thereby improved—, a solution of sodium cholate may be added from time to time during the agitation of the soap mass. Each addition of sodium cholate solution should be equivalent to not more than 0.2 per cent of the weight of the soap mass. Larger portions of sodium cholate cause a sudden agglomeration of the soap with the result that the mass becomes very thick. It is difficult to incorporate more than three per cent of sodium cholate in any cold-made soap. With all other types of soap except cold-made, the sodium cholate solution is crutched, mixed or milled into the finished soap. In the case of milled soaps, sodium cholate may also be milled in the form of undissolved powder.

The best method for making gall-extract soaps appears to be by milling the sodium cholate with the soap, because neutral, mild products are then obtained. If the principal advantage of an oxgall soap is its especial mildness, then it is entirely illogical to use a cold-made soap for this purpose, for such a soap will always and must contain more or less free alkali due to the incomplete saponification of the fat. In this case, even though the sodium cholate will mitigate the harsh action of the free alkali, its effectiveness as a preservative and as an emulsifier is diminished. However, a marked improvement in the detergent powers of the soap is attained if another type of emulsifier, acting in a different manner, is used in addition to the cholic acid. For example, sodium ricinoleic-sulfonate may be added. or even more advisably sodium lauryl-sulfonate. Sodium naphthenate will also improve the emulsifying action of the soap. Combinations of these substances may also be added.

Value of Sodium Lauryl Sulfonate

THE most favorable action is obtained when sodium lauryl-sulfonate is used. This substance is a white, odorless and almost tasteless powder. It has the appearance of a pure pulverized soap. Its striking characteristics are its extremely small weight per unit volume, its great porosity and its freedom from lumping. One liter of this substance weighs approximately 300 to 350 grams. Its emulsifying and wetting powers are much greater than those of soaps and the usual wetting agents. Its resistance to the action of acids, salts and water containing lime salts is also far greater than other wetting agents and soaps. Perhaps its most outstanding property is, however, that like soap, it will lather or foam considerably not only when shaken but also when rubbed. This is entirely contrary to the behavior of the sulfonated products and wetting agents which have been used up to the present time and which are sadly deficient in this respect. Sodium lauryl-sulfonate has also the faculty of blending its good properties with those of ordinary soap. It improves the good properties of soaps and diminishes the shortcomings, such as the strong tendency of soaps to hydrolyze, their insoluble lime and magnesia salts, and their susceptibility to the action of the salts of other metals as well as solutions of acids.

The addition of even small quantities of sodium lauryl-

sulfonate, approximately one per cent, has a noticeably favorable action on the properties of soap. On the other hand, the addition of even more than 20 per cent of this substance does no thave a bad effect on the lathering quality of ordinary soap, but really makes the lather more creamy. If other wetting agents are added in such large proportions to ordinary soap, the lathering power of the soap is usually destroyed. Like sodium cholate, sodium lauryl-sulfonate mitigates the harsh action of soda and oxygen compounds in the soap preparations without in any way effecting the specific favorable action of these ingredients.

Each of these emulsifiers, that is, sodium cholate and sodium lauryl-sulfonate, even in small quantities can stabilize during storage preparations containing oxygen compounds. They prevent the loss of oxygen from oxygen carriers (such as sodium perborate, sodium percarbonate and hydrogen peroxide) from solutions, from tooth pastes (although in this case sodium cholate cannot be used because of its taste), from soaps, soap powders and other detergents.

Both of these emulsifiers also have a beneficial effect on the mechanism of the action of these oxygenated preparations. They cause the evolution of oxygen in numerous, extremely small bubbles. Such bubbles adhere much more tenaciously to textile fibers than large bubbles which surge upward and burst above the surface of the wash liquor, resulting in entire loss of their bleaching action. Hence, the oxygen, which is liberated from preparations containing these emulsifiers, is conserved and utilized to better advantage. A seven per cent sodium perborate, which has been stabilized by the addition of either of these emulsifiers, has a stronger bleaching action than a 10 per cent unstabilized sodium perborate.

Both of these emulsifiers may be properly compared with sodium silicate as far as their preservative action in storage and their use in oxygenated preparations are concerned. When the two emulsifying agents are used in combination, the effect is better than when either of them is used alone. This is true in all cases, where it is desired to take advantage of their protective action and to increase the lathering quality, the emulsifying powers and the wetting power of oxygenated preparations.

Sodium cholate may be employed without technical difficulty in making transparent, soft, flakes and soap powders. The brownish color of technical sodium cholate affects the color of the soaps that are mixed with it, and the intensity of the coloring action will of course depend on the quantity of sodium cholate added. The addition of 0.5 per cent of sodium cholate to a pure white soap gives it a slightly yellowish color, much in the same way that the addition of two per cent of rosin to the fat mixture used in making ordinary soap makes it yellowish. When two per cent of sodium cholate is used, the soap is colored a very light brown, which is not as deep a shade as that of yellow curd soap. If the consumers of the soap are difficult to please because of the light color of these gall extract soaps, then it is an easy matter to remedy the trouble by coloring the soaps green.

When Used with Solvents

THE greatest cleansing effect is obtained with these soaps, when in addition to the emulsifying agents, solvents are also added. The older solvents such as benzine, oil of turpentine, petroleum, xylene and the like, may be used, or the newer solvents, such as carbon tetrachloride, trichloroethylene, isopropyl alcohol, benzyl alcohol and the like. The quantity of solvent used depends principally on the extent to which their odor does not become objectionable. Benzyl alcohol has almost no odor at all. It volatilizes only with difficulty. On the other hand, when it is added in the proportion of five per cent, it has a very deleterious action on the lathering quality of the soap. If it were not for this action, an exceedingly effective scouring soap could be obtained with it. If the best lathering quality and easiest solubility are to be developed in these products, a soap should be used made from a fatty mixture which contains at least 50 per cent of coconut oil.

Hence, in accordance with the foregoing explanation, a simple, mild-acting gall-extract soap is obtained in the following manner: Twenty kilograms of sodium cholate, dissolved in 30 kilograms of warm water, are well mixed with 1,000 kilograms of hot curd soap in a crutcher. The soap is then processed in the usual manner. Or 1,000 kilograms of easily-soluble soap flakes, containing only about four per cent water, are well mixed with 30 kilograms of sodium cholate, dissolved in 45 kilograms of warm water, and then milled.

A compounded, highly-active gall-extract soap is obtained from 1,000 kilograms of easily-soluble soap flakes, containing four per cent water, and the following substances: (1) 20 kilograms of anhydrous triethanolamine naphthenate; (2) 20 kilograms of sodium cholate dissolved in 30 kilograms of water; (3) 20 kilograms of sodium lauryl-sulfonate stirred into a paste with 30 kilograms of diethylene glycol monoethyl-ether (or benzyl alcohol). The soap flakes are first mixed with (1); after five minutes (2) is added, and after an additional five minutes (3) is added. The mixture is then treated in the crutches for approximately 15 to 30 minutes more. The soap may then be formed into cakes or converted into flakes or ground to a powder.

Uses of Cholate Soaps

CHOLATE soaps are used for fine laundering of sensitive, expensive fabrics, such as silk, wool, rayon and damask. They make these fabrics clean, long-lived, soft, fresh and renew their luster. The piece goods are wet rubbed with sufficient gall-extract soap, and then washed in lukewarm water. Or, the piece goods may be entered into lukewarm water containing approximately 0.1 per cent of the soap flakes. A very dilute

(*Turn to Page* 67)

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NEWPORT

Say you saw it in SOAP!

Refrigeration in Liquid Soap Clarification

By HERBERT KRANICH

President, Kranich Soap Company

THE satisfactory clarification of liquid toilet soap is without question one of the most difficult steps in the manufacture of these products. Proper and complete saponification, securing neutrality, and avoiding rancidity are in themselves sufficiently in the problem class to make things always interesting in the well-run soap plant. To obtain a crystal clear soap or shampoo, however, and one which will *remain* crystal clear,—is a considerably more difficult matter than any of the other manufacturing operations.

Various types of filtration at reduced temperature have long been used for liquid toilet soap clarification in the United States. The methods used have varied widely and have given results all the way from good to bad. In general, makeshift equipment has been set up to do the job. Little advance study has been given to the problem. As a consequence, lack of successful permanent clarification has been the result in most cases. Experience has shown that refrigeration and filtration are merely the tools, and that they must be used as such in certain definite ways to obtain satisfactory results. Merely to chill down a liquid soap to 35 or 40 Fahrenheit and pump it through a filter press is not enough.

The clouding of shampoos and liquid soaps after they have left the factory in clear, brilliant form, is quite common. It may be due to several causes. It may be due first to the slow solvent action of the liquid soap on a soft glass container with the liberation of lime and magnesia salts and the formation of the insoluble soaps of these metals. (In this case, an increase in alkalinity occurs simultaneously.) It may be due, especially in cold weather, to a precipitation from solution of some of the potash soaps of the higher titre fatty acids which occur in varying percentages in the vegetable oils used in liquid soap manufacture. The precipitation may also include certain potash acid soaps, or even sodium stearate, palmitate, or laurate, formed by soda impurities present in the caustic potash used. It may be in part due to the presence of small amounts of unsaponified oil, the high titre glycerides of which come out slowly at the lower temperatures, or due to unsaponifiable material in the oil. It may be due to the presence of lime, magnesia or iron soaps in the original soap batch.

The first requirement is to produce a soap properly saponified and, above all, correctly finished. Little need be said about this. Carelessly manufactured soaps, made in plants without chemical control, are their own worst enemies and require no further mention. This discussion concerns itself with liquid soaps which can be considered as correctly manufactured products,—not with so-called liquid soaps "made with a barrel and a shovel in the garage."

THAT the clouding of liquid soaps and shampoos in cold weather is due in part to the presence of the soaps of higher titre fatty acids seems to be borne out by the use of destearinated coconut and other vegetable oils. These oils show much less precipitation and consequent cloudiness when made into soaps. Where a chemically pure caustic potash is used, which is known to be free from any soda salts, there is of course no precipitation of soda soaps. However, practical consideration of the problem must be under usual plant conditions where regular commercial grades of coconut and other oils are used, as well as commercial caustic potash.

The various vegetable oils, including coconut, used in liquid toilet soap manufacture have a content of glyceryl stearate ranging from a few per cent up to fifteen or twenty per cent. They also contain varying percentages of palmitates, linoleates, laurates, oleates, etc. When these vegetable oils are made into liquid soaps, the less soluble higher titre soaps crystallize out of solution slowly as pearly lustrous laminae as the temperature is lowered. A further lowering of temperature brings out the other more soluble soaps in order of titre. Where the temperature is held at 32 Fahrenheit or slightly under this, the precipitation of even the higher titre soaps is very slow. It is this apparently which has caused considerable trouble in the reappearance of cloudiness at a later date. Where a liquid soap is chilled down and held at 32 F. for six to twelve hours and then filtered at or near this temperature, later clouding is common. Experience shows that at least 48 hours at the reduced temperatures ordinarily used, that is between 25 and 35 F., is necessary to give ample opportunity for all the lesser soluble potash soaps, potash acid soaps, as well as soda soaps, and soda acid soaps, unsaponified and

unsaponifiable matter, to precipitate from the solution so that they can be removed by filtration.

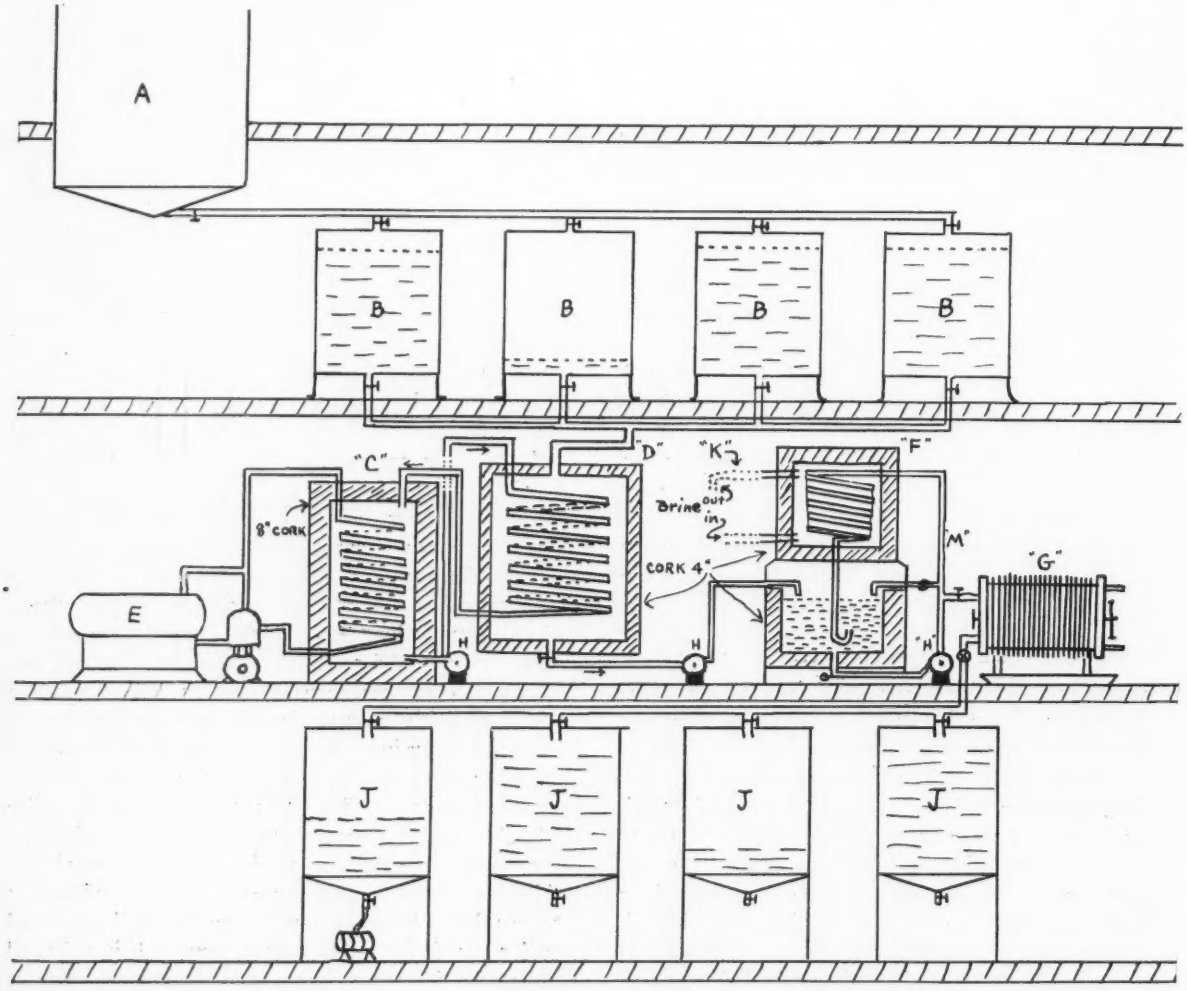
As far as the insoluble soaps are concerned, the solubility of calcium, magnesium, and iron stearates, palmitates, laurates, myristates, and oleates varies in water solution at about the same ratio in each case according to temperature variations. All are practically insoluble at 0 deg. C or 32 F. At 15 C, the range is between .003 and .01%. At 50 C, it is .01 and .03%, and at 100 C, 0.3 and 0.7%. At 32 F., substantially all are removed by filtration.

A MODERN refrigeration unit seems to be quite a necessary part of liquid soap and shampoo manufacture today. Where a capacity of twenty-five to fifty drums per day of soap or shampoo is required, we have in mind a regular two and one-half ton refrigeration unit. This is hooked up with a large reserve brine tank in which the brine is kept always at 25 F. by thermostatic control. A large reserve tank for brine is essential to good refrigeration efficiency. The brine reserve is in turn hooked up with thousand gallon cork-insulated tanks in which the actual chilling of the liquid soap takes place. The brine circulates through two inch pipe coils in these tanks, the coils extending the entire depth of the tanks.

The liquid soap is permitted to remain in the refrigerating tank without agitation for forty-eight hours, at the end of which time, it is pumped to smaller tanks prior to passing through the filter press. These smaller tanks, which are themselves equipped with chilling coils fed with brine from the central brine tank, are designed to give an equalized pressure of the liquid through the press.

The rate of flow of the liquid soap through the press is naturally important to the clarity of the finished soap. Too high a pressure of too rapid a filtration will not give

(*Turn to Page* 57)



Layout of refrigeration and clarification unit for liquid soap and shampoo. A—Soap Kettle. B—Ageing tanks, 1000 gals. each. C—Brine reserve storage tank with 8" cork insulation. D—Chilling tank covered with 4" of cork where soap stands 48 hours without agitation. E—Regular 2½ ton ice machine. F—Smaller cooling tank at press for keeping soap temperature down. G—Filter press, closed delivery. H—Pumps for brine and soap. J—Air-tight steel storage tanks, 1,000 gals. each. K—Brine connections for auxiliary cooling tank. Connection to main brine supply not shown. M—Recirculation system, seven gallons circulated to one filtered

The Five-Day Week In the Soap Industry

UNDER the stress of the economic difficulties of the past two years, the soap industry has turned to the five-day week as a convenient method for lowering production and spreading employment among as many of its workers as possible. The movement got under way over a year ago, and with the adoption of a five-day week program on October 10 by one of the largest concerns in the industry, this method of operation has become the rule rather than the exception.

The soap industry has not been hit nearly as hard as most other industries by unemployment. Soap production has held up well under the influence of lower raw material costs and lower selling prices. Nevertheless, it has been found desirable to spread available work as far as possible, and the industry has been generous in its cooperation with relief agencies working for the wider adoption of the five-day week as a measure of relief to industry in general.

As noted above, one of the largest American soap manufacturers has just adopted the five-day week for its factory employees, and hopes later to be able to extend this plan to include most of its clerical force. The work week has been reduced in plants to 45 hours, making it possible to put a substantial number of unemployed men to work and providing a greater measure of security for employees now working. Two other large manufacturers are also using the five-day week, one putting it in force last May and the other having operated under this plan throughout 1932. It is stated that no reductions have been made in basic rates of pay by these companies.

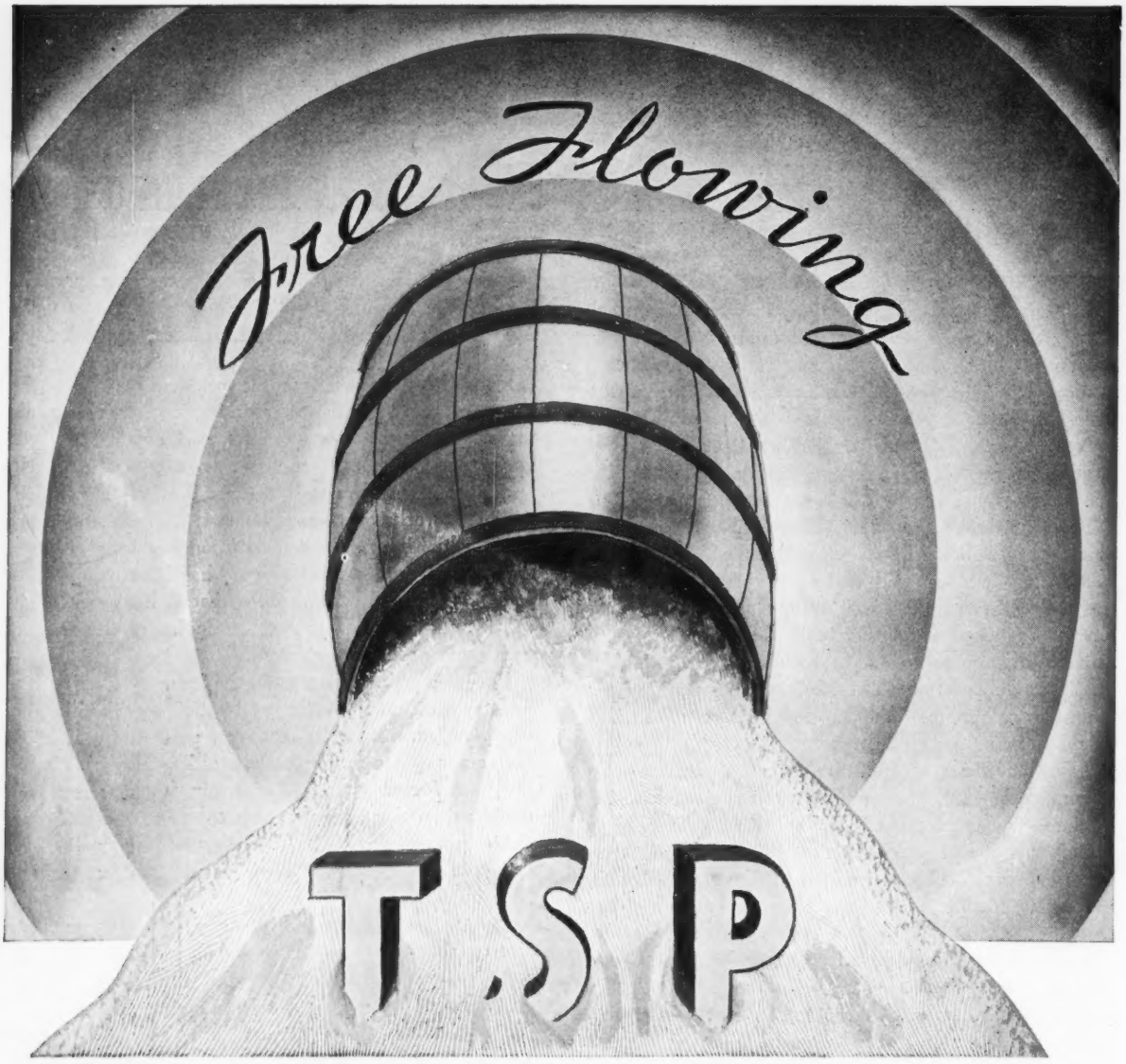
In many cases, of course, it has not been found possible to take on any more employees, even with the adoption of the five-day week. But at any rate, the shorter work week has made it possible to keep most all old employees at work, with the whole force getting some income. In the case of one concern which found stocks mounting too fast, the plan was adopted of rotating the services of various employees, rather than making any cut in the staff. Thus when work is slack in a certain department, part of the staff reports for work Monday, Wednesday and Friday, with the rest taking the alternate three days. Where the volume of work warrants it, the whole force works all week. Another concern, faced with the same problem, tried out two solutions,—alternating individuals so that each employee worked two or three weeks out of four, and the plan of reduced working days per week as outlined above. The second plan was found preferable, as employees were not absent from their jobs over such long periods. Further, the alternate days of rest were found to make them capable of better work on the succeeding work days.

ANOTHER approach to the problem has been the adoption of a shorter working day. One middle western concern has reduced its working day to seven hours, employing men on three seven-hour shifts. No employee, except foremen and keymen in the production line, works over seven hours a day. The men are paid by the hour, and no reduction has been made in the basic rate of pay. This plan has been in operation over a year, and reports state that it has worked out satisfactorily both from the standpoint of the workers and the management.

One of the first concerns in the industry to adopt the five-day week seems to be well satisfied with this plan of operation. Since its inception on January 1, 1931, the company has retained all its old employees. It has not been found possible to take on any new men, but neither does the company plan to reduce its staff over the coming year. Officials state that they will never return to the 5½ day week which was in effect prior to January, 1931.

One method of meeting the unemployment problem which was tried out with poor results by another concern is the method of using extra workmen to do miscellaneous repair work around the plant. Idle men were put to work shingling one of the company's buildings instead of being released. This move turned out badly, according to the report, as the men "soldiered" on the job to make the work last. It took them three to four times as long to get the job done as it would have a crew of experienced outside workers, and ran up the cost materially. Finding this method unsuccessful, the company adopted the fewer-day work week, and now plans a schedule of operations ahead from week to week, trying to give work to as many of its employees as possible.

SOME concerns report that they are still operating on the 5½ day week schedule, and find a number of objections to the five-day week as a device for extending employment to a larger number of people. One concern reports that there is no particularly acute problem of unemployment in the town where its plant is located, and that a reduction in the number of days worked would raise quite a problem in locating the skilled workers necessary to carry on production. This plant did operate on a five-day week through the summer



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months, but has recently returned to the 5½ day schedule. It is stated that no change has been made in the basic rates of pay, and all old employees have been retained.

A number of interesting comments were made on this "Share-the-Work" drive by a New York manufacturer who indicated that in his belief more good could be accomplished by guaranteeing security to present employees in the shape of future employment than by taking away from them to give to others some of their present opportunity for employment. His belief was that if present workers were sure of their jobs and their future income, they would have less tendency to hoard their cash, and would be willing to venture more in outlays against present and future needs. By either means the desirable end seems to be to guarantee security to a greater number of wage earners so that they will feel safe in spending what they have in anticipation of continuation of this income in the future.

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Soapers Report on Work-Sharing

A recent statement from W. C. Teagle of the Standard Oil Co. of N. J., chairman of the Share-the-Work Movement, on work-sharing in the soap industry is based on a report to him by Roscoe C. Edlund, manager of the Association of American Soap & Glycerine Producers, showing that the soap industry comes very close to being organized 100% on a share-the-work basis. The statement said in part:

"Lever Brothers Company has operated its plants at Cambridge, Mass., and Hammond, Ind., on a five-day basis throughout this year. Colgate-Palmolive-Peet Company went on a five-day week in all domestic departments of the company on May 1. The Procter & Gamble Company adopted the five-day week on October 10, William Cooper Procter, Chairman of the Board, announcing that the change would result in the employment of additional employees as well as provide greater security for those now at work.

"The Davies-Young Soap Company, of Dayton, O., reports that it has retained its full force but operates now on an 8-hour basis instead of 9-hour basis, and from 3 to 5 days a week according to the needs. Some employees, such as those in the shipping department, still work the full time of 5½ days.

"The Iowa Soap Company, of Burlington, Ia., reduced all its regular employees to a 7-hour day over a year ago. At present it is working three 7-hour shifts. This company reports: 'We have done everything possible to absorb the unemployed in our own city, and shall continue to do so.'

"The Perkins Soap Company, of Springfield, Mass., established the five-day week on January 1, 1931. The plan enabled the company to retain all its employees and it reports that the management is reasonably sure it will never return to the five-and-one-half day week. The Skat Company, of Hartford, Conn., has kept all its employees by distributing the available work on a budgeting system. A schedule apportioning the work is made up from week to week. The M. & J. Schnaible Company, of La Fayette, Ind., reports that it is endeavoring to keep all its employees at work.

"In addition to the above, two good-sized companies reporting to the Association but asking not to be quoted, wrote that, by adopting flexible working arrangements which, in one case, includes rotation of work, they are doing everything possible to keep all old employees at work and to share employment as widely as possible. One of these companies has made no reduction in the force employed at any time in the depression. Mr. Edlund estimates that the Share-the-Work plans of the various companies in the soap industry mean the employment of 10 to 15 per cent more workers than would otherwise now have jobs."

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Theile Heads P. R. Dreyer Inc.

F. C. Theile and E. R. Vetterlein, associated with the late P. R. Dreyer in the management of P. R. Dreyer Inc., New York, over the past ten years, have purchased

F. C. THEILE

E. R. VETTERLEIN

the entire stock and assets of the company and will continue to represent the same group of well-known foreign suppliers of essential oils and perfuming materials in the American market. F. C. Theile, a graduate chemist, has been with the concern since 1925 in the capacity of vice-president in charge of sales and laboratory research. Prior to that time he was associated with Chas. V. Sparhawk Corp. He will head the concern, and will also act as secretary and a director of Bertrand Freres, Inc., the American branch of the Grasse, France, organization for whom P. R. Dreyer Inc. is agent.

E. R. Vetterlein, treasurer of P. R. Dreyer, Inc., for the past ten years, and prior to that time associated with Pacific Trading Corp. of America, becomes vice-president and treasurer of the company, and will also act as treasurer and a director of Bertrand Freres, Inc. Among the foreign concerns for whom P. R. Dreyer Inc. acts as agent are the following: Bertrand Freres, French flower oils and essential oils; Brodr Aarsaether A/S, cod liver oil; Paolo Vilardi, citrus oils; Vanillin Fabrik, aromatic chemicals and essential oils; H. Raab & Co., synthetic musks, and Constantin Mintcheff & Ketchedjieff, otto of rose.

Stockton Buzby Dies Suddenly

Stockton S. Buzby, vice-president of Procter & Gamble Company in charge of sales, died at his home in Madeira, Ohio, a suburb of Cincinnati, October 29, death resulting from a blood clot on the brain. Mr. Buzby, 48 years old at the time of his death, joined Procter & Gamble Company two years after his graduation from Princeton College in 1905. The D. T. Buzby Company, founded by Mr. Buzby's grandfather, was the original sales agent for Procter & Gamble Company in Baltimore. After joining Procter & Gamble, Mr. Buzby was instrumental in locating one of the firm's local plants in Baltimore. His later career with the company included seven years as district manager of the New York office, following which he went to the Cincinnati office as general sales manager. Mr. Buzby, a native of Baltimore, was a member of the Camargo Country Club, Queen City Club, University Club, Princeton Cottage Club and also a number of civic and business organizations in Cincinnati and Baltimore. Since its formation in 1927, Mr. Buzby had been a director of the Association of American Soap & Glycerine Producers, and at the time of his death was a member of the executive and budget committees. He is survived by his wife, Mrs. Louise Orrick Buzby; a daughter, Martha Buzby; a son, Harry Buzby; two sisters, Mrs. Richard Randall and Margarita Buzby; and his mother, Mrs. Julia Van Ness Buzby.

Stockton Buzby

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Hold Annual Oil Trades Dinner

The annual banquet of the Oil Trades Association of New York, held in the Waldorf-Astoria hotel, the evening of October 19th, attracted the largest attendance on record. Among those present was F. W. Barnes, vice-president and director of purchases of Procter & Gamble Co., John B. Gordon, Bureau of Raw Materials, Percy C. Magnus, Magnus, Mabee & Reynard, and Charles B. Jones, president of the Philadelphia Oil Trades Association. The reception and dinner were followed by ten acts of vaudeville. The entertainment and banquet were arranged by Clifford Weihman and Joseph C. Smith, Smith-Weihman Co., Philip C. Meon, Borne, Scrymser & Co., and Bert Squier.

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The eight domestic firms which manufacture soap for the Ecuador market are reported to be extending their activities into the toilet soap field under the protection of a high tariff. They had previously concentrated almost exclusively on laundry soaps. Raw materials are obtained chiefly from Great Britain, although United States is the leading supplier of rosin.

SECURITY PRICES

PRICES of stocks of soap, chemical, insecticide, and allied companies as quoted on the New York Stock Exchange, Curb Exchange, other exchanges and over-the-counter are given in the following table. This table of prices is compiled monthly for *Soap* by a representative of one of the oldest and best-known brokerage houses in New York.

	High 1932	Low 1932	Oct. 1 1932	Nov. 1 1932
Allied Chem.	88¼	42½	81¾	71⅛
Am. Agric. of Del..	15½	3½	10¾	8
Amer. Cyan. "B"...	8½	1⅝	5⅝	4
Armour of Ill. "A"..	2¾	⅝	1⅞	1⅜
Bon Ami "A".....	54	31	50	49
Brillo	8⅜	4¼	6⅝	4½
Colgate, P. P.....	31½	11	15½	13½
Consolidated Oil Co.	9	4	6¾	6¼
Corn Prod.	55⅜	24¾	54¼	48¾
Coty	7⅜	1½	5	3⅝
Dow Chem.	40	21½	39	33
Drug, Inc.	57	23	39	30½
Du Pont	59¾	22	43⅝	32¼
Glidden	10⅜	3⅛	8	5
Gold Dust	20⅝	8¼	19¼	15⅝
Gulf Oil	44¾	23	33	29
Int. Agric.	3½	¼	1¼	1
Lehn & Fink.....	24¼	6	17	16⅛
Mathieson	20⅞	9	18	14¾
McKess. & Rob.....	6½	1⅛	5	3⅛
Monsanto	30¾	13⅜	26½	25⅛
Proc. & Gam.....	42¾	19⅞	33¾	30½
Shell Union	8¾	2½	6⅞	6⅛
Sher. Will	35	19⅜	26¾	21
S. O. of Cal.....	31⅞	15⅛	25⅞	24½
S. O. of Ind.....	25⅛	13⅛	21	22¾
S. O. of N. J.....	37⅜	19⅞	31	29¾
S. O. of Ohio.....	30⅛	15½	24¾	23½
Swift & Co.....	22	7	9⅛	7¾
Union Carb.	36⅜	15½	29	22½
Westvaco	12⅝	3	9⅝	6
Wilson & Co.....	1¾	⅝	1⅛	1

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Bon Ami Co. reports net profit of $835,270 for the nine months ended September 30, equal to $3.80 a share on 100,000 shares of class A common stock, and $2.27 a share on 200,000 shares of class B. This compares with $975,462 in the corresponding period of 1931, equal to $4.50 a share on class A and $2.62 a share on Class B. For the quarter ended Sept. 30, 1932, net profit was $300,365, as against $324,519 in the same quarter of last year.

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Exports of soda ash from United States during August, 1932, totaled 1,863,942 lbs., worth $33,308.

CHICAGO TRADE NOTES

AT the meeting of the Chicago Perfumery, Soap and Extract Association on Wednesday, November 2, final plans were made for the annual banquet. The Entertainment Committee, composed of W. Kedzie Teller, Chairman, of The Columbus Laboratories; D. A. Day, of Heine & Co.; Russell G. Brown, of George Silver Import Co.; Walter H. Jelly, of Walter H. Jelly & Co., and Roy F. Downs, of Owens-Illinois Glass Co., announced that arrangements had been concluded to hold the banquet at the Knickerbocker Hotel ball room on the evening of Thursday, December 8. This was the scene of last year's affair, which was one of the most popular in recent years. The entertainment will consist of dancing and five vaudeville numbers. Table reservations already received indicate that at least as many members as in the past will assemble their friends in large numbers. Mr. Teller has offered the welcome news that the souvenir bags will not suffer by comparison with those of last year in weight, size, or number and attractiveness of contents.

The Association had no speaker at this meeting, devoting it entirely to reports of committees, appointment of a nominating committee, and preparations for the annual business meeting and election of officers to be held on the first Wednesday of December. Paul H. Pettit, Chairman of the Bowling Committee, reported that the attendance had been sufficient to warrant preparations for a tournament, on a handicap basis, to be held probably late in November. Commendation was offered the Golf Committee for its excellent conduct of the seasons tournaments.

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Chicago Drug and Chemical Association has completed arrangemnts for its annual fall banquet. As in the past few years, this affair is limited to members only, and will be in the nature of a stag. It will be held in the ball room of the Knickerbocker Hotel on the evening of Thursday, December 22. The membership list now numbers approximately two hundred and thirty-five. Entertainment will consist chiefly of vaudeville acts in sufficient number to fill the entire evening. There will be souvenir bags as usual. The usual monthly meeting will be omitted in December. Arrangements for the banquet are under the charge of Walter A. Kochs, of Victor Chemical Works, chairman of the committee; Floyd K. Thayer, of Abbott Laboratories, vice-chairman; Chris Christensen, of Chas. Pfizer & Co., Inc.; Charles S. Curtis, of The Wilson Laboratories; L. S. Flanedy, of Parke, Davis & Co.; F. J. Heil, of Grasselli Chemical Co., Inc.; Ottmar M. Krembs, of Krembs & Co.; Leo A. Lanigan, of McKesson-Fuller-Morrison Co.; Frank L. McCartney, of Norwich Pharmacal Co.; A. G. Schneider, of Victor Chemical Works; W. Kedzie Teller, of The Columbus Laboratories, and W. P. Trebilcock, of Coca-Cola Co.

The Western Co., manufacturers of Dr. West's tooth paste and brushes, moved its offices to the Merchandise Mart during the third week of October.

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Frank V. Varallo, for many years associated with Norda, Incorporated, was married on October 8 to Eileen Durkin, of Chicago. The ceremony was performed, with a Nuptial Mass, at Our Lady of Solace Church by Rev. Father G. Durkin, brother of the bride.

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Recent new incorporations in Chicago include Cosmetics, Inc., at 5710 Armitage avenue, and American Compound Co. of Illinois, at 180 W. Washington street.

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New names among those recently announced as having taken space for exhibition in the Hall of Science at the Century of Progress Exposition, the building of which is progressing rapidly, include Mallinckrodt Chemical Works; Abbott Laboratories; Iodent Chemical Co.; Bauer & Black; Hynson, Westcott & Dunning, Inc.; Merck & Co., and E. R. Squibb & Sons.

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Wilson & Bennett Mfg. Co., steel containers, Chicago, have appointed Milton F. Robie as sales representative in the Boston territory, with headquarters at 89 Broad Street, Boston, telephone Liberty 4576. Formerly H. T. West Co., represented Wilson & Bennett in this district.

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Ask Review of Castile Soap Decision

The Federal Trade Commission has asked for a review of the castile soap case in a petition to the U. S. Supreme Court asking for a writ of certiorari to the seventh circuit court of appeals which set aside the Commission's cease and desist order against James S. Kirk & Co., Chicago, now a part of Procter & Gamble Co. After an extended investigation the commission ordered the company to stop using the term, "Castile," on any soap not having olive oil as the exclusive fatty ingredient. Part of the evidence was a popular bulletin on cleansing materials issued by the United States Bureau of Standards, defining castile soap as an olive oil soap. During the proceedings the Bureau of Standards issued a revised edition of this bulletin in which it was stated that the term, "Castile," was often used for other than olive oil soaps and that the legality of this practice was then being litigated. On the basis of this second edition, the circuit court set aside the commission's order on the ground that one branch of the Federal government could not forbid what another branch accepted.

In asking supreme court review, the commission declares that the circuit court did not disturb any of the commission's findings and challenges the theory that the Bureau of Standards has authority to give Federal government approval to any trade practice, that a paragraph in its bulletin should be given greater weight than the extensive investigation of the Federal Trade Commission, or that the bureau has power to nullify the commission's orders.

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Rogan Elected P & G Director

At the annual meeting of stockholders of Procter & Gamble Company, held in Cincinnati, October 12, Ralph R. Rogan, secretary and advertising manager of the company, was elected a director, succeeding the late James N. Gamble. Mr. Rogan has long been active in the company, having directed the Procter & Gamble advertising department over a period of more than twenty years. Other directors elected were Walter Livengood, Carlous Richardson and J. T. Coale, employees in the company plants at Ivorydale, New York and Kansas City. They succeed Thomas Peters, Harry Goodey and Henry J. Meyer.

R. R. Rogan

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Aim to Ban Imported Oils

The markets of the United States are being flooded with fish oil and other organic oils and fats at prices which American producers cannot meet, A. M. Lomis, representing the tariff defense committee of the National Dairy Union, testified at a hearing in the Bureau of Customs at Washington on November 26, when an effort was made to bring about a finding that anti-dumping provisions of the tariff act are being violated. Mr. Loomis declared a very considerable portion of the imported oils find their way into the manufacture of soaps. The hearing was held on complaint of domestic producers of oils who claimed they are losing their markets and facing bankruptcy, and who therefore urged that the provision of the anti-dumping law be invoked.

Commissioner F. X. A. Eble, who presided at the hearing announced that an investigation is now under way in the tropical countries, which are the source of the imports, and that the results of this inquiry will be considered. That a powerful organization has been built up to keep out the foreign oils or increase the tariff duty, the effect of which would admittedly be increased soap prices, was shown when the list of complainants was read into the record.

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Los Angeles Soap Co., sponsoring the Chandu radio program in the West, has informed radio stations that it will not pay the three per cent music tax demanded by the American Society of Composers, Authors and Publishers since it has exclusive rights to the music used in the Chandu programs. The Society is seeking to levy this tax on all radio time charges regardless of whether the music used is copyrighted by its members or not. Los Angeles Soap Co. has stated that it will go off the air rather than submit to this unfair tax.

Soap & Glycerine Assn. Meets Dec. 14

The annual meeting of the Association of American Soap and Glycerine Producers will be held at the Waldorf-Astoria Hotel, New York, on December 14, according to an announcement by Roscoe C. Edlund, manager of the Association. A meeting of the board of directors of the Association will be held on the same day. Sessions of the one-day meeting will be closed to members. R. R. Deupree, president of Procter & Gamble Co., is president of the Association and will preside at the annual meeting.

—o—

United Africa-Balfour-Guthrie Consolidated

Effective November 15, a change is to be put into effect in the make-up of The United Africa Co., Inc., New York, the present staff and offices being consolidated with Messrs. Balfour-Guthrie organization located at 67 Wall Street, New York. The United Africa Company, Inc., whose chief business has been the importation of cocoa, palm and palm kernel oils, will retain its corporate identity and continue to trade as heretofore at the above address.

—o—

Gold Dust Denies Tax Liability

Denying the claim of the Commissioner of Internal Revenue that income tax in the amount of $15,241.50 is still due the government, Gold Dust Corp., with which the Standard Milling Co. was merged in 1929, has asked the United States Board of Tax Appeals to overrule the federal bureau head.

In controversy is the income tax liability of Standard Milling Co. from July 1, 1929 to August 23, 1929 which, if any is found, is payable by Gold Dust Corp. as transferee. The latter corporation filed a tax return covering this and other subsidiaries, but its deductions to cover depreciation, foreign tax payments, etc., were rejected and the tax now sought to be collected is based on amounts restored to the taxable list.

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Canadian Soap Tariff Up

Substantial increases in Canadian duties on soap and various ingredients used in the manufacture of soap, are provided for in the new preference tariffs. The former duty of $1 per 100 pounds applicable to common or laundry soap imported into Canada from the United States has been raised to $1.50 per 100 pounds, while the rate of 65 cents per pound formerly applicable to British imports has been reduced to 50 cents, thus giving British manufacturers an advantage of 65 cents per 100 pounds. The former duty of 1 cent per pound on castile soap made in England has been eliminated, with no change being made in the rate of 2 cents per pound applicable to American-made soap. Thus British manufacturers of castile are given an advantage of 1 cent a pound.

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• BERGAMOT SYNTHETIC NO. 12

Lowers your Cost of Bergamot WITHOUT change in odor value.

• LAVENDER FOR SOAPS

Unusually Penetrating—Lasting—Fine quality odor. COSTS LESS than U. S. P. Lavender. Gives BETTER RESULTS.

Samples and quotations on request

FELTON CHEMICAL COMPANY

Executive Offices and Factory—599 JOHNSON AVE., BROOKLYN, N. Y.

Chicago, Ill., Office—1200 NORTH ASHLAND AVE.

Stocks Carried in the Following Cities:

LOS ANGELES, CAL.	SAN FRANCISCO, CAL.	CHICAGO, ILL.	NEW ORLEANS, LA.
WM. PAUER,	P. J. RICH,	M. HARTSTEIN,	ROBERT E. FELTON,
1131 N. Orange Grove Ave.	1282 Folsom St.	1200 No. Ashland Ave.	Balter Bldg., Rm. 407.

Say you saw it in SOAP!

PERSONAL AND IMPERSONAL

Lever Bros. Co., recently concluded a sampling campaign in the Chicago market in which girls were employed to distribute goods and coupons entitling receivers to free goods. These coupons were exchangeable by the retailer for the regular retail price.

—o—

Benjamin Cisenfeld, owner of Earle Soap Mfg. Co., Baltimore, has taken over Virginia Lee, Inc., Baltimore, and will continue to operate the concern as Virginia Lee Distributing Co. The concern does an extensive business in theatrical make-up preparations.

—o—

Colgate-Palmolive-Peet Co., has been offering a special deal in the Chicago market recently on "Palmolive" and "Crystal White" soaps. Two giant cakes of the latter are given free with three cakes of "Palmolive."

—o—

Ward & Stamm Co., Adrian, Mich., have adopted new packages for their *Laundo* laundry compound and W. & S. water softener.

—o—

The makers of Sunset soap dyes, North American Dye Corp., Mt. Vernon, N. Y., are offering a new hand cream under the name *Barrington*. Merchandising plans are practically completed.

—o—

R. R. Deupree, president of Procter & Gamble Co., represents advertisers on a committee making a detailed study of advertising agency compensation. Other committee members are Lee W. Maxwell, Crowell Publishing Co., representing publishers, and A. W. Erickson, McCann-Erickson, Inc., acting for the agencies. The committee has appointed James W. Young, professor of business history, University of Chicago, to make an independent, impartial investigation of the subject.

—o—

Colgate-Palmolive-Peet Co. and the Conover Electric Dishwasher Co. are co-operating in a sixty-day contest being advertised over the radio on the "Clara, Lu'n' Em" program. Women are asked to write a letter limited to 200 words describing a practical tested use for *Super Suds*, the best letter writer for each day receiving an electric dishwashing machine. In the 400 word advertising announcement, about one-third is given over to describing the dishwasher as a valuable and practical prize. Both companies are also working on their dealers in connection with the campaign.

—o—

H. & H. Cleaner Co., Des Moines, Iowa, are wrapping H. & H. Cleaner Soap in waxed paper instead of tin foil. The plant was recently moved to larger quarters at 134 E. Locust St., where considerable new machinery was installed. Included in the new equipment was a Johnson Automatic Sealer, made by the Battle Creek Wrapping Machine Co., Battle Creek, Mich., with a capacity of 36 cakes a minute.

—o—

Pynol Co., Burlington, Iowa, makers of "Pynol" toilet soap, report satisfactory results with the use of "Hercules" pine oil as an ingredient in this product. It is said to impart antiseptic and deodorizing qualities to the soap, as well as a pleasant fragrance.

—o—

Robley D. Stevens, Philadelphia, formerly associated with John B. Ellison & Sons, has been appointed Philadelphia representative for George A. Schmidt Co. and H. H. Fairchild & Bro., Chicago, and will handle sales of soaps made by these concerns. He will also travel the New York territory for George A. Schmidt Co., and will cover Baltimore, Washington and Wilmington for both concerns.

—o—

William R. Heath, formerly vice-president of Larkin Co., Buffalo, until his retirement in 1924, died in Buffalo recently at the age of 69. Mr. Heath first became associated with the Larkin Soap Manufacturing Co. in 1899 when he moved to Buffalo.

—o—

Thornton Gardner, managing director of Yardley & Co., Ltd., London, returned to England on the *Empress of Britain*, October 15, after a two-weeks stay in United States, during which he conferred with Cecil Smith, vice-president, and Curtis Campaigne, sales director, of the American Yardley & Co., New York.

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Harold Schulze, formerly with Patent Cereals Co., Geneva, N. Y., manufacturers of cleansers, has been appointed advertising manager of "The News This Week," Rochester, N. Y.

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Herman L. Brooks, formerly sales director of Houbigant, Inc., has been made general sales manager of the concern. Mr. Brooks has just returned from a short trip to Paris.

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Potter & Moore, London, manufacturers of Mitcham soaps, toilet waters, creams, etc., has appointed W. I. Tracy, Inc., New York, as advertising counsel. Newspapers and magazines will be used.

—o—

National Chemical & Supply Co., 1215 Rutger St., St. Louis, has been organized to engage in the manufacture of soaps and soap products.

El Cid Products Co., 1717 Folsom street, San Francisco, has recently started operations, manufacturing liquid soap and shampoos.

—o—

Pine Tree Products Co., Newport, N. H., has announced a new milled cake of "Billy B. Van's Pine Tree" soap. The new cake is said to have an even more pleasant and pronounced pine fragrance than the original "Pine Tree" soap, and has been further improved by the design of a new wrapper. Sales are now to be handled exclusively by the Newport, N. H., office of Pine Tree Products Co., all distributing companies and branch sales offices having been dispensed with.

—o—

E. R. Squibb & Sons have started advertising a smaller unit of Squibb's tooth paste to sell at a suggested retail price of 25 cents. The new size has been placed on the market to help the company get a share of the business of those who will not consider paying over 25 cents for toothpaste, also to help in supporting the retail price on the large tube.

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Al Rosenfeld, Inc., New York, is acting as exclusive distributor in the United States for a line of lavender soaps and toiletries made by Dubuis & Rowsell, Ltd., London.

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A new concern in the Chicago soap industry is Deneud, Inc., 1 N. La Salle street.

—o—

Squibb Athletic Association, made up of employes of E. R. Squibb & Sons, Brooklyn, held its first entertainment and dance in the grand ballroom of the Hotel St. George, Brooklyn, on Friday evening, Oct. 21. Some 1,200 persons attended. Music was furnished by the National Broadcasting Company. The committee on arrangements was headed by Frank Zachmann, vice-president of the Association, and the reception committee by S. F. Urban. J. W. Hines headed the entertainment committee.

—o—

Members of the Canadian Perfumers and Manufacturers of Toilet Articles were guests of Addington Doolittle, Compagnie Parento, Inc., Croton-on-Hudson, N. Y., at a recent banquet at the Royal York Hotel, Toronto. Among those present were: G. A. Clarke, Lever Bros. Co.; A. P. Taylor and J. M. Catto, Soaps-Perfumes, Ltd.; and A. J. Edkins, United Drug Co.

—o—

Southern California Laundry Owners Association has been ordered by the U. S. Federal Trade Commission to discontinue cooperating in a combination to prevent and restrain manufacturers of laundry machinery, equipment and supplies from freely selling and transporting their products from the various States in which they are manufactured, to laundry owner customers in California, not members of respondent associations.

John A. Chew, vice-president of the Swann Chemical Co. in charge of sales, resigned effective Nov. 1 to establish John A. Chew & Co., New York, which company will act as selling agents for several chemical manufacturers. Mr. Chew has been associated with the sale of chemicals for the past thirty years, beginning his business career as an office employe in the New York branch of the old Powers-Weightman-Rosengarten Co., now a part of Merck & Co. Prior to his association with the Swann interests over the past two years, Mr. Chew was for a number of years vice-president in charge of sales for the Warner Chemical Co., New York. He is a widely-known character throughout the American chemical industry.

John A. Chew

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A manufacturer has agreed to discontinue use of the word "Witch Hazel" to designate soap that does not contain witch hazel in sufficiently substantial quantities as to be so designated.

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Frank W. Norton, secretary-treasurer of M. W. Parsons Imports and Plymouth Organic Laboratories, Inc., New York, died recently at his home in Bloomfield, N. J.

—o—

White King Soap Company, Los Angeles, Cal., has announced appointment of G. L. Acker as state manager for Iowa with headquarters at Des Moines. Mr. Acker formerly worked under the Omaha, Neb., branch of the firm, will supervise activities in Iowa from Des Moines, the change being made to secure better administration than was possible from the Nebraska office.

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Emulso Laboratories is a new soap-making firm with headquarters at 57 Clementina Street, San Francisco. Product is an industrial soap which emulsifies in salt water.

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Kenneth G. Voorhees, son-in-law of F. H. Ungerer, has joined the Ungerer & Co. organization, and will work out of the New York office on sales development. His previous business experience has been with Wanamaker's, New York, where he was assistant buyer of china, glass and pottery, and with Loeser's, Brooklyn, where he was buyer of the same line.

—o—

Procter & Gamble Co. is reported to be planning expenditure of an additional $250,000 on improvements, bringing its total recent expenditures on industrial rehabilitation up to $2,250,000.

CONTRACTS AWARDED

Lever Bros. Co. was recently awarded a contract for a quantity of "Lifebuoy" toilet soap for the Boston U. S. Army Quartermaster at a price of 5.4c, and a quantity of "Lux" toilet soap at a price of 6.24c. Globe Grocery Co., South Boston, awarded quantity of "Lux" toilet soap at 6.2c and quantity of "Palmolive" toilet soap at 6.2c. Burlington Grocery Co., Burlington, Vt., awarded quantity of "Fairy" toilet soap at 3c. BeVier & Co., New York, awarded quantity of "Pepsodent" antiseptic at 31.5c and "Pepsodent" toothpaste at 32c. Kolynos Co., New Haven, awarded "Kolynos" toothpaste at 17.85c. S. S. Pierce Co., Boston, awarded "Pebeco" toothpaste at 31.5c. J. B. Williams Co., Glastonbury, Conn., awarded quantity of "Williams" toothpaste at 13.1c.

—o—

Colgate-Palmolive-Peet Co., Chicago, has recently been awarded a number of contracts for supplying soap for the Fort Sam Houston quartermaster as follows: 5,040 lbs. laundry soap, 3.43c; 2,820 lbs., 3.43c; 1,200 lbs., 3.43c.; 3,420 lbs., 3.45c; 1,440 lbs., 3.93c; and 17,520 lbs., 3.25c. General Soap Co., San Francisco, was awarded 3,600 lbs. of laundry soap at 3.89c, and Swift & Co., San Antonio, was awarded 2,400 lbs. at 3.32c. Day & Frick, Philadelphia, awarded 8,000 cakes grit soap at 2.95c. Lightnin' Lye Co., Painesville, Ohio, awarded 13,000 cans caustic soda at 6.5c. Peaslee-Gaulbert Corp., Dallas, awarded 500 lbs. soda ash at 3.25c. No award entered on 75,000 lbs. of laundry soap.

—o—

Oakite Products, Inc., New York, has been awarded contracts for Middletown Air Depot, Pa., as follows: 1,680 lbs. Oakite mixture No. 3, 15.63c. and 1,120 lbs. Oakite mixture No. 1, 10.26c.

—o—

General Soap Co., San Francisco, has been awarded a contract for delivery of chip soap to the Fort Mason, Cal., U. S. Quartermaster, at a price of 3.87c.

—o—

A manufacturer of cosmetics has agreed in a stipulation with the Federal Trade Commission to discontinue the use of the words "Poudre de," "Fleur de" and "Jardin de" and other French words, either alone or in connection with the word "Paris", in a manner to imply the products so designated are manufactured in Paris or imported therefrom, when such is not the fact.

The Grasselli Medal of the American Section of the Society of Chemical Industry was awarded to Professor George L. Clark of the University of Illinois at a meeting of the society in Brooklyn, November 4. The award was made for his work on X-ray research as applied to chemical problems.

—o—

On November 1st the Robert Gair Company, Inc., manufacturers of paperboard and paperboard products, moved its executive and New York City sales offices to the new Commerce Building, 155 East 44th Street, New York City. Need for additional space prompted the move. In its new quarters, the Gair Company will have 50% more space than in its former offices, occupying the entire eleventh floor in the Commerce Building.

—o—

A manufacturer of toilet products including soap, creams, and powders, has signed a stipulation with the Federal Trade Commission agreeing to discontinue misrepresenting the effectiveness of a certain treatment for enlarged pores; to discontinue representing that a certain doctor was former chairman of an organization known as "American Society of Dermatologists"; and to discontinue use of the statement "These noted dermatologists unanimously found respondent's soap most effective of all beauty aids," when such is not the fact.

—o—

The 1932 *Commerce Yearbook*, issued by the U. S. Department of Commerce is now available for distribution, copies being obtainable from the branch offices of the Bureau of Foreign and Domestic Commerce or from the Superintendent of Documents, Washington, D. C. The Year-book is the Government's official review of American business in the calendar year, 1931, and contains individual surveys of each major industry, together with pertinent tables, charts and graphs.

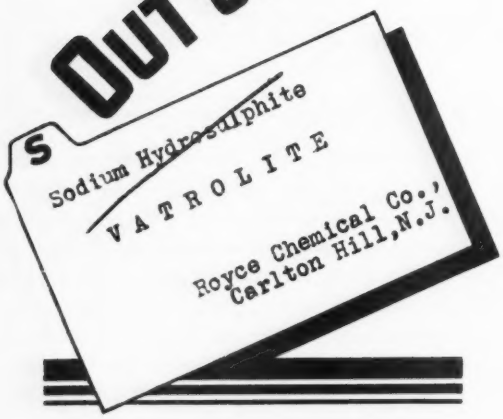
—o—

An incorporated association consisting of distributors of barber and beauty supplies, has been compelled by the Federal Trade Commission to agree to discontinue providing manufacturers with lists of members and requesting, threatening and coercing such manufacturers in an effort to induce them to distribute their products through association members only.

—o—

George Briasco, formerly with John C. Rodriguez Co., New York essential oil broker, has joined George Uhe, Inc., New York.

OUT OF THE "S" FILE.. INTO THE "V's"!



Lift out your contract card! . . prepare a place for VATROLITE . . a product named for *performance* and turned out on a rigidly balanced Quality schedule.

Match a working sample against your own ideas of a *perfect* bleaching agent . . *No charge!*

Sodium Hydrosulphite takes this new name!

VATROLITE! . . recording new efficiency standards as a Bleach for Soap stocks . . color-reducing naturally dark-tinted fats and greases . . lightening the over-shades of certain soaps.

VATROLITE! . . of highest purity, full strength, and uniform in every respect . . with an anti-oxidant effect which prevents any tendency to rancidity.

VATROLITE is manufactured and amply stocked here, ready for quick transit routing. Name your requirements! In damp-proof drums of 50, 100 and 250 lbs. capacity.

This Year it's

VATROLITE

SODIUM HYDROSULPHITE

REG. U.S. PAT. OFF.

ROYCE CHEMICAL COMPANY

Manufacturing Chemists

CARLTON HILL · NEW JERSEY

NEW ENGLAND REPRESENTATIVES: RICHARD HAWORTH, Inc., 83 FOUNTAIN STREET, PROVIDENCE, R. I.

Made by the originators of DISCOLITE and VELVORAY

Say you saw it in SOAP!

RECORD OF TRADE-MARKS

The following trade-marks were published in the October issues of the *Official Gazette* of the United States Patent Office in compliance with Section 6 of the Act of September 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of publication. As provided by Section 14, fee of ten dollars must accompany each notice of opposition.

Trade Marks Filed

ACTO—This is solid letters describing hand soap and auto polish. Filed by Atlas Supply Co., Newark, Mar. 9, 1932. Claims use since Feb. 18, 1932.

INK-O-WAY—This in solid letters describing hand cleaners. Filed by Marfred Laboratories, New York, June 29, 1932. Claims use since May 12, 1932.

VELO—This in outline letters describing cleansing preparation. Filed by Keystone Lubricating Co., Philadelphia, July 30, 1932. Claims use since July 20, 1932.

DEMOCRATIC—This on carton together with words "Let's Clean Up America," describing soap. Filed by William Warren Taylor, Los Angeles, June 15, 1932. Claims use since May 3, 1932.

SITOX—This in solid letters describing sweeping compound. Filed by International Sisal Co., Minneapolis, Aug. 29, 1932. Claims use since July 15, 1931.

JERMENE—This in script describing antiseptic and germicide. Filed by Hachmeister-Lind Co., McKees Rocks, Pa., Aug. 1, 1932. Claims use since July 12, 1932.

SHI-NUP—This in solid letters describing polish. Filed by S. C. Johnson & Son, Racine, Wis., Feb. 8, 1932. Claims use since July, 1915.

DIRTKILLER.—This in solid letters describing cleaning compound. Filed by Detergent Products Corp., Atlanta, July 1, 1932. Claims use since May, 1931.

MARCELLE—This in solid letters in diamond shape, describing shoe polish. Filed by Deauville-Palatine Corp., New York, Aug. 4, 1932. Claims use since July 7, 1932.

G L—This in broken letters describing cleansing compounds, soaps and metal polish. Filed by Grace-Lee Products, Inc., Minneapolis, Aug. 8, 1932. Claims use since Apr. 1, 1932.

CRE-TO-LA—This in solid letters describing disinfectant and insecticide. Filed by Bullen Chemical Co., Folcroft, Pa., Mar. 28, 1932. Claims use since Jan. 1, 1907.

SHIELDU—This in solid letters, together with woman holding shield, describing antiseptic and germicide. Filed by Grace G. Orr, San Pedro, Cal., June 11, 1932. Claims use since July 1, 1931.

KNOK-EM-KOLD—This in solid letters describing insecticides. Filed by Nourse Oil Co., Kansas City, June 23, 1932. Claims use since Sept. 1, 1931.

MURPHY'S GOLD-FLO SHAMPOO—This in solid letters describing shampoo. Filed by Phoenix Oil Co., Cleveland, July 26, 1932. Claims use since May 25, 1932.

MURPHY'S SILVER-FLO SHAMPOO.—This in solid letters describing shampoo. Filed by Phoenix Oil Co., Cleveland, July 26, 1932. Claims use since May 25, 1932.

LABORSAVER.—This in solid letters describing cleaning compound. Filed by Detergent Products Corp., Atlanta, July 1, 1932. Claims use since Aug., 1931.

FLEABAR.—This in solid letters describing insecticidal soaps. Filed by Abbott Laboratories, North Chicago, Ill., Aug. 17, 1932. Claims use since Mar. 19, 1932.

KILZUM—This in solid letters describing flea soap. Filed by Potter-Wrightington, Inc., Charlestown, Mass., Aug. 31, 1932. Claims use since Sept. 1, 1930.

HYO—This in solid letters describing cleaning compound. Filed by Hyo Products Co., Binghamton, N. Y., Sept. 8, 1932. Claims use since July 14, 1932.

LA RUE'S FRENCH PASTE—This, together with portrait of woman, describing soap paste. Filed by Hopkins Chemical Co., Newark, N. J., Sept. 14, 1932. Claims use since January, 1929.

WIP—This in outline letters, with sketches of insects, describing insecticide. Filed by Universal Insecticide and Disinfectant Co., Philadelphia, May 25, 1932. Claims use since Jan. 2, 1932.

VITA-CELL—This in solid letters, with sketch of flying bird, describing antiseptic and deodorant. Filed by Godissart & Pyles, Hollywood, Cal., July 30, 1932. Claims use since June 16, 1932.

SANS SOUCI—This in solid letters describing antiseptic. Filed by Sans Souci Products Co., Los Angeles, Aug. 4, 1932. Claims use since Oct. 6, 1931.

HY-G-DENT—This in shaded letters within diamond, describing tooth paste. Filed by Hy-G-Dent Co., New York, Aug. 19, 1932. Claims use since Aug. 10, 1932.

JEFF—This in engraved letters, describing insecticide. Filed by Brazilian Insecticide Co., Brooklyn, Aug. 26, 1932. Claims use since May 1, 1932.

Trade Marks Granted

297,806. Tooth powder. Nyal Co., Detroit. Filed May 2, 1932. Serial No. 326,689. Published June 28, 1932. Class 6.

297,808. Insecticides, Rodenticides. C. B. Dolge Co., Westport, Conn. Filed April 6, 1932. Serial No. 325,-846. Published June 28, 1932. Class 6.

297,831. Shampoo. Dryolet Mfg. Co., St. Louis. Filed May 20, 1932. Serial No. 327,272. Published June 28, 1932. Class 6.

297,842. Insect Exterminating Spray, Crystals, Tablets, Deodorants, and Disinfecting Preparation. Waltham Chemical Co., Waltham, Mass. Filed April 15, 1932. Serial No. 326,171. Published July 5, 1932. Class 6.

297,848. Soaps and Soap Powders. Apex Soap and Sanitary Corp., Pittsburgh. Filed March 4, 1930. Serial No. 296,795. Published May 6, 1930. Class 4.

297,863. Automobile Polishes. D. A. Collins Mfg. Co., Brooklyn. Filed May 18, 1931. Serial No. 314,685. Published July 12, 1932. Class 16.

297,866. Soaps. Kaufmann Department Stores, Inc., Pittsburgh. Filed May 18, 1932. Serial No. 327,223. Published July 19, 1932. Class 4.

297,869. Cleaning Compound. Okay Distributing Service, Lakewood, Ohio. Filed April 22, 1932. Serial No. 326,377. Published July 12, 1932. Class 4.

297,871. Cleaning Compound. Union Oil Company of California, Los Angeles. Filed March 7, 1932. Serial No. 324,857. Published July 19, 1932. Class 4.

297,902. Disinfectant. Marschall Dairy Laboratory, Madison, Wis. Filed July 14, 1931. Serial No. 316,933. Published September 29, 1931. Class 6.

297,944. Shaving Cream. Four Square Products, Inc., Dover, Del. Filed May 25, 1932. Serial No. 327,-430. Published July 12, 1932. Class 4.

298,005. Liquid Wax. Felco Products & Mfg. Co., New York. Filed April 19, 1932. Serial No. 326,313. Published August 2, 1932. Class 16.

298,010. Automobile Body polish. Goodyear Tire & Rubber Co., Akron, Ohio. Filed May 24, 1932. Serial No. 327,394. Published July 26, 1932. Class 16.

298,018. Cleanser. Lee Products Co., Lee, Mass. Filed June 2, 1932. Serial No. 327,657. Published Aug. 2, 1932. Class 4.

298,057. Soap. L. R. MacKenzie Incorporated, Tulsa, Okla. Filed June 20, 1932. Serial No. 328,131. Published August 2, 1932. Class 4.

298,059. Soap. Procter & Gamble Co., Cincinnati. Filed June 16, 1932. Serial No. 328,038. Published July 26, 1932. Class 4.

298,062. Liquid Wax. Selig Co., Atlanta. Filed June 14, 1932. Serial No. 327,990. Published August 2, 1932. Class 16.

298,119. Polish. Celolac Products Co., Minneapolis. Filed January 26, 1931. Serial No. 310,432. Published June 21, 1932. Class 16.

298,185. Washing Sodas. Magnuson Products Corp., Brooklyn. Filed May 13, 1932. Serial No. 327,064. Published July 12, 1932. Class 6.

298,189. Germicide. McKinley Gassett, Washington, D. C. Filed May 25, 1932. Serial No. 327,432. Published July 26, 1932. Class 6.

298,196. Insecticides. Diamond Brand Products, Inc., Philadelphia. Filed June 11, 1932. Serial No. 327,906. Published July 26, 1932. Class 6.

298,204. Bath Tablet. James F. Ballard, Inc., St. Louis. Filed April 28, 1932. Serial No. 326,573. Published July 12, 1932. Class 6.

298,205. Antiseptic Jelly. Veritas Products Co., New York. Filed April 27, 1932. Serial No. 326,564. Published July 12, 1932. Class 6.

298,209. Bath Tablet. James F. Ballard, Inc., St. Louis. Filed April 28, 1932. Serial No. 326,574. Published July 12, 1932. Class 6.

298,212. Antiseptic. Halitest Co., San Diego, Calif. Filed March 17, 1932. Serial No. 325,233. Published July 19, 1932. Class 6.

298,221. Germicide. Phenochrome Germicidal Corp., Oxford, N. Y. Filed May 10, 1932. Serial No. 326,952. Published July 12, 1932. Class 6.

298,222. Antiseptic. Johnson & Johnson, New Brunswick, N. J. Filed May 10, 1932. Serial No. 326,942. Published July 12, 1932. Class 6.

298,235. Preparations for the Extermination of Rats, Vermin, Etc. B. & B. Exterminators, Inc., Baltimore. Filed January 5, 1932. Serial No. 322,734. Published April 19, 1932. Class 6.

298,237. Preparations for Exterminating Insects. Getz Exterminators, Inc., St. Louis. Filed January 2, 1932. Serial No. 322,634. Published July 19, 1932. Class 6.

298,249. Toothpaste. Tastie Tooth Paste Co., Bloomfield, N. J. Filed July 21, 1931. Serial No. 317,178. Published July 12, 1932. Class 6.

298,289. Insect Exterminator. Automatic Washer Co., Newton, Iowa. Filed May 16, 1932. Serial No. 327,126. Published July 19, 1932. Class 6.

298,379. Sweeping Compound. Chemical Corporation of America, Minneapolis. Filed July 5, 1932. Serial No. 328,548. Published August 16, 1932. Class 4.

298,383. Soap Flakes. Wesco Foods Co., Cincinnati. Filed June 22, 1932. Serial No. 328,220. Published August 16, 1932. Class 4.

298,385. Metal Polish, Soaps, Etc. Alymp-Ol Soap Works, Taunton, Mass. Filed June 27, 1932. Serial No. 328,318. Published August 16, 1932. Class 4.

298,386. Furniture and Automobile Polish. Gertrude A. Kreymer, Spokane, Wash. Filed June 7, 1932. Serial No. 327,797. Published August 9, 1932. Class 16.

298,415. Auto and Furniture Polish. Midway Chemical Co., Chicago. Filed December 11, 1931. Serial No. 322,024. Published August 9, 1932. Class 16.

298,449. Antiseptic. Halitosine Co., St. Louis. Filed March 24, 1930. Serial No. 297,819. Published June 24, 1930. Class 6.

Wilbur-Ellis Opens Chicago Office

Brayton Wilbur, president of Wilbur-Ellis Co., brokers in fish and whale oils, fats, vegetable oils and oilseeds, has been in the New York territory for the past month, making his headquarters at the New York office at 21 West street. He has just left for Chicago with Ray B. Mattson, where they are opening a branch office in the Board of Trade Building. Mr. Mattson has been with Wilbur-Ellis Co. on the west coast for the past ten years. The concern operates offices in San Francisco, Los Angeles, Seattle and Vancouver. The New York office is in charge of John N. Dallon, formerly of Brown-Edwards Co.

—o—

Alsop Expands Service Division

Alsop Engineering Corp., New York, specialists in all matters pertaining to liquid processing, have been expanding their service organization over the past six months, and now have thirteen trained representatives in various parts of the country to assist in the solution of problems which arise in modern liquid manufacturing processes. They are located as follows: Baltimore, G. K. Heller, 217 N. Calvert street; Boston, E. A. Knowlton, 10 High street, 504 Rice Bldg.; Chicago, Loeb Equipment Supply Co., 618 W. Lake street; Cincinati, Williams Sales Co., 1288 Rutledge avenue; Connecticut, Wm. Engesser, Bethel; Detroit, G. J. Keeler, 2457 Woodward avenue; Kansas City, James M. Cowie & Co., 2233 Grand avenue; Los Angeles, J. W. Leser & Co., 1001 E. 1st street; Newark, Chas. T. Knorr, 80 Elizabeth avenue; Philadelphia, T. R. Turner, P. O. Box No. 26, Phoenixville, Pa.; Pittsburgh, J. B. Kent, 607 Benedum Trees Bldg.; St. Paul, H. L. Biersach, Pine and E. 3rd Streets; San Francisco, Marshall Dill, 510 Montgomery street.

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The first annual American Beauty and Styles Exposition was held at Grand Central Palace, New York, October 17-20, with an attendance of approximately forty thousand. This was the first beauty show ever designed to appeal direct to the public, and its success was interpreted by the backers to mean that the beauty industry as a whole needs a closer relationship with the women upon whom it depends for its existence.

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The recent annual convention of the International Beauty and Barbers' Supply Dealers' Association, held in Washington, was attended by more than 800 persons. More than 100 exhibits were displayed by manufacturers and dealers, among the exhibitors being; Colgate-Palmolive-Peet Co.; Conti Products Co.; Davies-Young Soap Co.; Harley Soap Co.; Johnson & Johnson; National Oil Products Co. and J. B. Williams Co.

—o—

Cook Swan Co. Chanin Building New York, has taken over the inventory of Cook Swan Oil Corp., importer and refiner of fish, vegetable and animal oils, and will also operate its Bayway, N. J., plant.

New Patents

Conducted by
Lancaster, Allwine & Rommel
Registered Attorneys
PATENT AND TRADE-MARK CAUSES
815 15th St., N. W., Washington, D. C.

Complete copies of any patents or trade-mark registrations reported below may be obtained by sending 25c for each copy desired to Lancaster, Allwine and Rommel. Any inquiries relating to Patent or Trade-Mark Law will also be freely answered by these attorneys.

No. 1,878,164, Chlorine Preparation, Patented September 20, 1932, by Charles Mindeleff, Jackson Heights, N. Y., assignor to Louise G. Rabinovitch, Golden, Colo. The method of producing a soluble active chlorine compound in solid or powder form, which consists in the absorption of a hypochlorite solution by an alkaline carbonate.

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No. 1,878,547, Soap Manufacture, Patented September 20, 1932, by Julius A. Schwantes, Wauwatosa, Wis., assignor to Colgate-Palmolive-Peet Company, Chicago. The combination with a conveyor means, of means for forming soap into cakes on the conveyor means, and means for polishing and finishing the cakes while on the conveyor means.

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No. 1,879,953, Cleansing Composition, Patented September 27, 1932, by Walter A. Scott, Poughkeepsie, N. Y., assignor to The De Laval Separator Company, New York, N. Y. A composition for cleaning dairy equipment containing trisodium phosphate, sodium metasilicate, soda ash and soap in about the following relative proportions: trisodium phosphate 30-50%, sodium metasilicate 40-60%, soap 2-10%, and not over about 10% of soda ash.

—o—

No. 1,875,466, Insecticide, Patented September 6, 1932, by Hugh Knight, Glendora, California, assignor, by direct and mesne assignments to Emulsoids, Inc., New York, N. Y. An insecticide comprising butyl-ricinoleate and an emulsifier.

—o—

No. 1,876,768, Method of Treating Sulfonated Oils, Etc., Patented September 13, 1932, by William Seltzer, Passaic, N. J. The hereindescribed method of purging a sulfonated oil, fat or fatty acid of the undesirable fraction which consists in mixing such oil, fat or fatty acid in the presence of water with an untreated oil substance ordinarily substantially non-volatile and allowing the water-soluble and water-insoluble portions of the entire content to separate into two distinct bodies.

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Market Report on

ESSENTIAL OILS AND AROMATICS

(*As of November* 8, 1932)

NEW YORK—The feature of the market for essential oils and aromatic chemicals this period was a sharp drop in the price of oil camphor, sassafrassy, brought about by weakness in Japanese exchange, which brought with it several declines in derivative products. Sassafras, artificial, and safrol were both reduced following the cut in camphor oil prices. Among the other new features were lower prices on lemongrass and rosemary oils. On the other side of the market where oil bois de rose and oil cananga, both of which continued strong following recent advances.

Oil Anise

No change was reported in the price of anise oil this period, but more interest was apparent on the part of buyers. Several substantial orders are reported to have been placed recently at the present market level.

Oil Bois De Rose

Stocks of cayenne and Brazilian oil are still reported to be very short in foreign markets, and in spite of less interest on the part of buyers this period prices were maintained at previous levels.

Oil Camphor

Japanese exchange reached a new low this period, one of the results being a sharp drop in the price of camphor oil. sassafrassy, which is now quoted at 10c lb. This development led to lower prices on safrol and sassafras, artificial, which are quoted now at 20c and 16c lb., respectively.

Oil Citronella

Lower prices were established by sellers of oil citronella this period, who found this the only way in which to turn supplies into cash. The current quotation is 35c lb. for Ceylon oil, with Java selling at 48c.

Oil Lemongrass

Shipment quotations on lemongrass were lower this period, sellers apparently being forced to make concessions in order to realize on stocks. The present market is 42c to 44c lb.

Oil Rosemary

Another weak point in the market was oil rosemary which dropped to a basis of 27c to 30c a pound this period.

—o—

Swift & Co. are sponsoring a new radio broadcast series by Thurston, the magician. The new program goes on Thursdays and Fridays over a 20 station chain. This succeeds the Stebbins Boys program in the Swift radio schedule.

—o—

Check Misleading Soap Advertising

A distributor of soap products has recently signed a stipulation with the Federal Trade Commission agreeing to stop advertising that people should beware of soaps containing animal fats. The distributor further agrees to discontinue circulating a test or formula designed to show that soaps made with animal fats contain free alkali, when such is not the fact; and to discontinue publishing a warning against the use of soaps that contain animal fats on the score that most soaps are made of animal fats or grease that is scraped from the dinner dishes, that they leave a greasy film on the skin that clogs the pores, makes the skin coarse, prevents it from throwing off the poisonous bodily excretions, and often causes eruptions, when such are not the facts.

—o—

Cin-Made New Firm Name

The Cin-Made Corporation is the new corporate name of the Cincinnati Mailing Device Co., Cincinnati, manufacturers of fibre cans, mailing tubes, and cases. The change was made, according to A. J. Harris, general manager of the firm, because "Our present name is somewhat of a misnomer and does not properly typify the products we manufacture. In view of the fact that for a number of years, we have used the trade-mark Cin-Made in our advertising and on our products, many people have become accustomed to address us in that manner rather than as The Cincinnati Mailing Device Co. Therefore, we have concluded that by changing our name, we will be able to more closely connect our name with our products." Mr. Harris stated that the change in name, which became effective Nov. 1, will in no way alter the management or policies of the company, or the selling or internal organization.

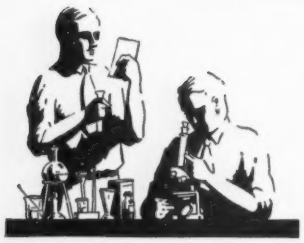
—o—

United States imported 201,695 lbs. of toilet soap in September, 1932, this having a value of $48,800, and comparing with 93,214 lbs., worth $30,584, in September, 1931. Imports of castile soap in September, 1932, were 122,152 lbs., worth $10,657, as against 249,661 lbs., valued at $24,940, in September, 1931.

—o—

Bopf-Whittam Corp., woolfat products, Westfield, N. J., has opened a New York sales office in the Empire State building. The telephone number is Pennsylvania 6—7250.

MEET the Specifications Economically with



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RESEARCH in the soap industry forges ahead, and soap makers are learning new things about the part silicates of soda play in modern detergents.

"N" Brand Silicate is the soap maker's standard, but occasionally there comes a special need for a silicate of somewhat different ratio. P. Q. Silicate Headquarters can satisfy your specifications. P. Q. Service applies to more than prompt deliveries. Consult us about your detergent problems.

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Market Report on

SOAP AND DISINFECTANT CHEMICALS

(*As of November* 8, 1932)

NEW YORK—The market for soap and disinfectant chemicals marked time during the period just closed, with buyers and sellers alike awaiting the outcome of the presidential election before making definite commitments. The alkali schedule for 1933 had not yet been made public at press time, although it is indicated in several quarters that no change is expected from 1932 prices. The glycerine market continues seasonally active, with the anti-freeze trade taking substantial amounts of material. Little change was noted on rosin quotations which moved within very narrow limits over the past month.

ALKALIS

No announcement has as yet been made as to alkali prices for 1933, producers being disposed to hold off until after the presidential election before making next year's plans known. It was suggested in some quarters, however, that no change would be forthcoming, the 1932 prices holding good for another year. Several producers were reported to be seeking business on this basis.

COAL TAR CHEMICALS

Manufacturers of coal tar disinfectants are reported to be exercising a good demand for creosols this period, with cresylic acid and creosote oil less active. Considerable interest was shown this period in imported naphthalene, due to the reported shortage of stocks abroad. Phenol was in good demand this period at previously quoted prices.

GLYCERIN

The automobile anti-freeze trade is reported to be taking substantial stocks of glycerin, with indications that there will be a very appreciable advance in use of glycerin preparations this year, due to their lower price. Dynamite glycerin advanced from 7c to 7½c lb. this period. Soap lye, while still quoted at the 4½c price of last period, found buyers lacking interest and disposed to pay no more than 4c lb.

NAVAL STORES

Price quotations moved within narrow limits in the rosin market this period, the net result for the month being a drop of 5c to 15c a barrel on a number of grades. Shipments were light through the period, but due to equally light arrivals, stocks showed little change. The closing schedule follows: Gum Rosin, Grade B, $3.50; H, $3.87; K, $4.50; N. $5.25; WG, $5.75; WW, $6.55; Wood, $3.63 to $3.83.

Report to P & G Stockholders

R. R. Deupree, president of Procter & Gamble Co., in addressing the annual meeting of stockholders held in Cincinnati, October 12, stated that during the quarter ended September 30 sales had been held within 3% of the total for the corresponding period of the previous fiscal year. He indicated that on the basis of all forecasts made, the company should earn and pay its regular dividend during the current fiscal year which began July 1, 1932. Inventories were written down to market levels on June 30, 1932, and there is no indication that any such loss will be sustained again in the current fiscal year. Radical economies have been introduced throughout the company which is now operating at 80 per cent of the unit cost of the previous year. An aggressive sales campaign during the first nine months of the current year was necessary to keep sales high. During the first six months sales were off 8% from the figures of the previous year, as compared, however, with an estimated drop of 12% for the industry at large. As indicated above, sales in the third quarter were off only 3%, with the company steadily increasing its proportionate volume of total business.

—o—

Mathieson Alkali Works reports net income of $126,409 for the third quarter of 1932, comparing with $171,929 in the previous quarter and $387,256 in the same quarter of 1931. E. M. Allen, president of the company, reports that in September the company was able to increase operations materially, with the result that operations in that month accounted for almost half of the earnings in the third quarter. Shipments in July were the lowest in many years.

—o—

Monsanto Chemical Works reports net profit of $201,821 for the third quarter of 1932, comparing with $361,720 in the same quarter of last year. Net for the first nine months of 1932 was $726,042, as against $1,033,174 in the same period of 1931.

—o—

Exports of caustic soda from United States in September, 1932, totaled 7,833,127 lbs., worth $162,484. Soda ash exports totaled 2,429,432 lbs., valued at $38,896.

—o—

Exports of gum rosin from United States during July, 1932, totaled 99,196—500 lb. barrels, valued at $526,329. Exports of wood rosin totaled 12,483 barrels, worth $68,715.

RED OIL

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We collect, render and refine all of the raw materials used in our stearic acid and red oil. This close control, not available in any other brand, insures high quality products by eliminating low grade raw materials. Let us submit samples and prices. There is no substitute for quality. Use them in your

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Soap Color Makers Since 1917

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Market Report on

TALLOW, GREASES AND OILS

(*As of November* 8, 1932)

NEW YORK—Prices of soapmaking oils, fats and greases were substantially lower this period, the declines ranging from fractions to a cent a pound on some items. Buyers were inactive throughout the period, being inclined to wait until the results of the presidential election were known. A downward movement was apparent all through last month, paralleling similar movements in stocks and commodities. This was checked in the first week of November, following several rather steadying pronouncements on the possible results from changes in the political situation. The basic markets registered fair recoveries, which at press time, however, had not yet been reflected in prices of many of the items making up the oil and fat list.

Coconut Oil

Little demand was made for coconut oil this period, and prices sagged on all grades. Manila tanks are currently quoted at 3¼c. lb., New York, and 3c. lb., Pacific coast. Copra was unchanged at $1.90 per 100 lbs.

Corn Oil

Lack of demand for corn oil, as well as weakness in competing product, was responsible for a drop of a cent a pound in the price of crude oil this period, the current quotation being 3¼c. lb.

Cottonseed Oil

Cottonseed oil was lower this period, following the trend of commodity and security markets. Little interest was shown by traders, the tendency being to stay out of the market until after the election. Crude oil is available at 3c. lb.

Greases

In a quiet market quotations on house and yellow grease slumped off to 2½c. lb., white grease being quoted at 2¾c. to 3¾c. lb.

Lard

Prime steam lard was one of the first basic commodities to recover from the recent decline. Going as low as 4⅛c. lb., it reversed its trend late in the period and closed at 5c. lb.

Tallow

Tallow dropped a half-cent a pound this period in a quiet market. Buyers and sellers alike were inactive, apparently willing to await further developments before making any definite moves. City extra is quoted at 3c. lb., f.o.b. plant.

Issue Stearic Acid Dumping Order

Following the appearance before Commissioner F. X. A. Eble, the bureau of customs, of representatives of a number of American producers of stearic acid, October 26, an order of suspicion of dumping on the part of foreign producers was issued by the bureau. J. G. Lerch, an attorney representing domestic producers, stated that over recent months large shipments of stearic acid have been coming in from the Netherlands, selling at 50 per cent of American production costs. Selling prices of foreign stearic acid were said to be substantially below quoted prices in the markets of the countries of origin, leading to the belief that European producers may have an agreement for dumping excess stocks in the American market. It was charged that Russia is also participating in dumping stearic acid. On future imports bonds for 100 per cent of the value of shipments must be deposited, which will be forfeited if investigation proves the dumping charge justified. An increase in tariff rates on stearic acid is asked by American producers to equalize production costs.

—o—

Britain and British territories are losing their preeminence in the world's palm oil trade, according to a survey just issued by the Empire Marketing Board, London. Before the war British territories accounted for 79% of palm oil production, while the figure today has been reduced to 59%. Britain is no longer the leading importer she was before the war, as United States, Germany and other countries are to an increasing extent filling their needs by direct importations. United States is now by far the most important consumer of palm oil.

—o—

The Chinese sesame seed crop is estimated at 120,000 to 130,000 short tons this year in a late cable from the United States Consulate at Hankow. The crop is reported to be fully harvested and of good quality. About 70,000 tons will be available for export.

—o—

A new method of refining coconut oil which involves percolation through powdered and acid-washed animal charcoal has been developed by the Industries Department of the Government of Bengal, India.

—o—

Palm oil exports from Sumatra to United States totaled 20,916,658 kilos during the period from January to June, 1932. This compares with 10,900,856 kilos in the same period of 1931.

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for Soaps *and* Cleaners

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"STAUFFER BRAND" Caustic Soda can be supplied either solid or liquid, in drums or tank cars. It is uniform, pure and worth while using in your soap products. Send your next Caustic Soda inquiry to us.

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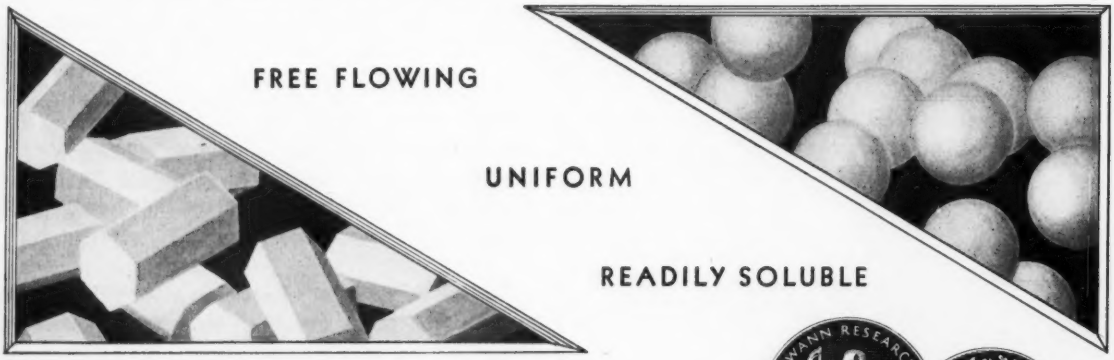

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CURRENT PRICE QUOTATIONS

As of November 8, 1932

Minimum Prices are for car lots and large quantities. Price range represents variation in quotations from different suppliers and for varying quantities.

Chemicals

Acetone, C. P., drums.....lb.	.10	.11
Acid, Boric, bbls., 99½%.....ton	95.00	100.00
Cresylic, 97% dk., drums.....gal.	.42	.43
97-99%, pale, drums.....gal.	.49	.53
Formic, 90%, tech.....lb.	.10½	.12
Oxalic, bbls.....lb.	.11	.11¼
Adeps Lanae, hydrous, bbls.....lb.	.14	.15
Anhydrous, bbls.....lb.	.15	.16
Alcohol, Ethyl, U. S. P., bbls.....gal.	2.45	2.59
Complete Denat., No. 5, drums., ex. gal.	.35½	.43½
Alum. potash lump.....lb.	.03	.03¼
Ammonia Water, 26°, drums, wks...lb.	.02½	.02¾
Ammonium Carbonate, tech., bbls...lb.	.08	.12½
Bleaching Powder, drums.....100 lb.	1.75	2.35
Borax, pd., cryst., bbls., kegs....ton	50.00	55.00
Carbon Tetrachloride, car lots.....lb.	—	.06¼
L. C. L.....lb.	.06½	.07
Caustic, see Soda Caustic, Potash Caustic		
China Clay, filler.....ton	10.00	25.00
Cresol, U. S. P., drums.....lb.	.10½	.11
Creosote Oil tanks.....gal.	.11½	.12½
Formaldehyde, bbls.....lb.	.06	.07
Fullers Earth.....ton	15.00	24.00
Glycerine, C. P., drums.....lb.	.10¼	.10½
Dynamite, drums .....lb.	.07½	.08½
Saponification, tanks .....lb.	.05	.05½
Soaps, Lye, tanks.....lb.	.04½	.04¾
Hexalin, drums .....lb.	—	.30
Kieselguhr, bags .....ton	—	35.00
Lanolin, see Adeps Lanae.		
Lime, live, bbls.....per bbl.	1.70	2.20
Mercury Bichloride, kegs.....lb.	.93	1.08
Naphthalene, ref. flakes, bbls.....lb.	.03¾	.05
Nitrobenzene (Myrbane) drums....lb.	.09½	.11
Paradichlorbenzene, bbls., kegs....lb.	.15	.23
Paraformaldehyde, kegs .....lb.	.38	.39
Petrolatum, bbls. (as to color).....lb.	.01⅞	.06¾
Phenol, (Carbolic Acid), drums....lb.	.14¼	.16
Pine Oil, bbls.....gal.	.61	.66
Potash, Caustic, drums.....lb.	.06⅛	.06⅜
Flake .....lb.	.07	.08
Potassium Bichromate, casks.....lb.	.08	.08½
Pumice Stone, powd.....100 lb.	2.50	4.00
Rosins (600 lb. bbls. gross for net)—		
Grade B to H, basis 280 lbs.....bbl.	3.50	3.87
Grade K to N.....bbl.	4.50	5.25
Grade WG and WW.....bbl.	5.75	6.55
Wood .....bbl.	3.63	3.83
Rotten Stone, pwd. bbls.....lb.	.02½	.04½
Silica, Ref., floated.....ton	18.00	22.00
Soap, Mottled 40 lb. box.....lb.	—	.12
Olive Castile, bars, powder.....lb.	.12	.22
Powdered White, U. S. P.....lb.	.14	.16
Green, U. S. P.....lb.	.06½	.07½
Tallow Chips .....lb.	.07½	.08
Whale Oil, bbls.....lb.	.04	.04½
Soda Ash, contract, wks., bags, bbls. 100 lb.	1.12½	1.38
Car lots, in bulk	—	1.00
Soda Caustic, Cont., wks., sld...100 lb.	—	2.50
Flake .....lb.	—	2.90
Liquid, tanks .....lb.	—	2.15
Soda Sal., bbls.....100 lb.	1.05	1.15
Sodium Chloride (Salt).....ton	11.40	14.00
Sodium Fluoride, bbls.....lb.	.07½	.08½
Sodium Hydrosulphite, bbls.....lb.	.22	.26
Sodium Silicate, 40 deg., drum, 100 lb.	.75	.80
Drums, 60 deg. wks.....100 lb.	—	1.65
In tanks, 15c. less per hundred, wks.		
Tar Acid Oils, 15-25%.....gal.	.21	.25
Trisodium Phosphate, bags, bbls.....lb.	.03	.0390
Zinc Oxide, lead free.....lb.	.06	.06¼
Zinc Stearate, bbls.....lb.	.16	.18

Oils—Fats—Greases

Castor, No. 1, bbls.....lb.	.09¾	.10½
No. 3, bbls.....lb.	.09¼	.10
Coconut		
Ceylon, Coast Tanks .....lb.	.02⅞	.03
Cochin, barrels, N. Y. .....lb.	.05	.05⅛
Manila, tanks, N. Y. .....lb.	.03⅛	.03¼
Tanks, Pacific Coast.....lb.	.02⅞	.03
Cod, Newfoundland, bbls.....gal.	.21	.26
Copra, bulk, Coast .....lb.	—	.0190
Corn, tanks, mills.....lb.	.03¼	.03½
Bbls., N. Y.....lb.	.05¼	.05½
Cottonseed, crude, tanks, mill....lb.	—	.03
PSY .....lb.	.03⅞	.04
Degras, Amer., bbls.....lb.	.02½	.03¾
English, bbls .....lb.	.03⅝	.03⅞
German, bbls .....lb.	.02⅞	.03⅛
Neutral, bbls. .....lb.	.06½	.08½
Greases, choice white, bbls., N. Y...lb.	.02¾	.03¾
Yellow .....lb.	.02⅜	.02½
House .....lb.	.02⅜	.02½
Lard, prime, steam, tierces.....lb.	.04⅞	.05
Compound tierces .....lb.	.06	.06½
Lard Oil,		
Extra, bbls. .....lb.	—	.07½
Extra, No. 1, bbls. .....lb.	—	.07
No. 2, bbls. .....lb.	—	.06½
Linseed, raw, bbls., spot.....lb.	.0660	.0700
Tanks, raw .....lb.	-	.0600
Boiled, 5 bbls. lots.....lb.	—	.0780
Menhaden, Crude, tanks, Balt. ...gal.	—	.09½
Oleo Oil, No. 1, bbls., N. Y. .....lb.	—	.06⅜
No. 2, bbls., N. Y. .....lb.	—	.05⅞
Olive, denatured, bbls., N. Y.....gal.	.55	.58
Foots, bbls., N. Y. .....lb.	.04⅜	.04½
Palm, Lagos, casks, spot.....lb.	.03¾	.03⅞
Shipments .....lb.	—	.03
Niger casks, spot .....lb.	.03⅛	.03¼
Shipments .....lb.	—	.02¾
Palm Kernel, casks, denatured ....lb.	.04½	Nom.
Tank cars, denatured .....lb.	—	.03¾
Peanut, domestic tanks .....lb.	.03⅝	.03⅞
Red Oil, distilled, bbls. .....lb.	.06⅝	.07¼
Saponified, bbls. .....lb.	.06⅝	.07¼
Tanks .....lb.	—	.05¾
Soya Bean, domestic tanks, N. Y...lb.	—	.03¾
Stearic Acid		
Double pressed .....lb.	.08	.08½
Triple pressed, bgs. .....lb.	.10¾	.11¼
Stearine, oleo, bbls. .....lb.	.05½	.05¾
Tallow, special, f. o. b. plant .....lb.	.02¾	.02⅞
City, ex. loose, f. o. b. plant .....lb.	—	.03
Tallow, oils, acidless, tanks, N. Y. ..lb.	—	.06
Bbls., c/1, N. Y. .....lb.	—	.06½
Whale, nat. winter, bbls., N. Y. ..gal.	.51	53
Blchd., winter, bbls., N. Y. ....gal.	.54	.55
Extra blchd., bbls., N. Y. .....gal.	.57	.58

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Coconut Oil	Castor Oil	Red Oil	Caustic Potash
Cottonseed Oil	Sesame Oil	Soap Colors	Carbonate Potash
Palm Kernel Oil	Lard Oil	Chlorophyll	Bath Powder
Stearic Acid	Palm Oil	Soda Ash	Modified Soda
Oleo Stearine	Corn Oil	Sal Soda	Caustic Soda
Soya Bean Oil	Peanut Oil	Talc	Silicate of Soda
Palm Kernel Oil (English or German Denatured)	Grease (Animal)		

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As of November 8, 1932

Essential Oils

Almond, Bitter, U. S. P.	lb.	$2.25	$2.50
Bitter, F. F. P. A.	lb	2.50	2.75
Sweet, cans	lb	.38	.40
Apricot, Kernel, cans	lb.	.24	.26
Anise, cans	lb.	—	—
U. S. P., cans	lb.	.30	.31
Bay, tins		1.60	1.90
Bergamot, coppers	lb.	1.90	2.00
Artificial	lb.	1.35	1.50
Birch Tar, rect., bot.	lb.	.45	.50
Crude, tins	lb.	.13	.14
Bois de Rose, Brazilian	lb	.92	1.00
Cayenne	lb	2.00	2.10
Cade, cans	lb.	.26	.27
Cajuput, native, tins	lb.	.52	.54
Calamus, bot.	lb.	2.75	3.00
Camphor, Sassy, drums	lb	.10	.11
White, drums	lb.	.11	.12
Cananga, native, tins	lb.	1.70	1.80
Rectified, tins	lb.	2.20	2.30
Caraway Seed	lb.	1.55	1.65
Cassia, Redistilled, U. S. P.	lb.	.86	.88
drums	lb.	—	.84
Cedar Leaf, tins	lb.	.75	.80
Cedar Wood, light, drums	lb.	.28	.30
Citronella, Java, drums	lb.	.49	.50
Citronella, Ceylon, drums	lb.	.35	.36
Cloves, U. S. P., cans	lb.	.80	.90
Eucalyptus, Austl., U. S. P., cans	lb.	.25	26
Fennel, U. S. P., tins	lb.	1.00	1.10
Geranium, African, cans	lb.	4.20	4.60
Bourbon, tins	lb.	4.30	4.70
Hemlock, tins	lb.	.75	.80
Lavender, U. S. P., tins	lb.	1.85	3.50
Spike, Spanish, cans	lb.	.55	.75
Lemon, Ital., U. S. P.		.80	1.25
Lemongrass, native, cans	lb.	.42	.44
Linaloe, Mex., cases	lb.	1.50	1.60
Neroli, Artificial	lb.	10.00	20.00
Nutmeg, U. S. P., tins	lb.	.95	1.00
Orange, Sweet, W. Ind., tins	lb.	1.20	1.25
Italian cop.	lb	1.20	1.90
Distilled	lb.	.75	.80
Origanum, cans, tech.	lb.	.25	.40
Patchouli	lb.	3.75	5.50
Pennyroyal, dom.	lb.	1.55	1.60
Imported	lb.	1.10	1.15
Peppermint, nat. cases	lb	1.70	1.80
Redis., U. S. P., cases	lb	1.90	2.05
Petit Grain, S. A., tins	lb	1.00	1.10
Pine Needle, Siberian	lb.	.60	.63
Rose, Natural	oz.	6.50	15.00
Artificial	oz.	2.00	2.75
Rosemary, U. S. P., drums	lb.	.36	.40
Tech., lb. tins	lb.	.27	.30
Sandalwood, E. Ind., U. S. P.	lb.	6.50	7.50
Sassafras, U. S. P.	lb	.70	.80
Artificial	lb.	.16	.19
Spearmint, U. S. P.	lb.	.95	1.00
Thyme, red, U. S. P.	lb.	.50	.65
White, U. S. P.	lb.	.60	.70
Vetivert, Bourbon	lb.	4.50	5.00
Java	lb.	16.00	20.00
Ylang Ylang, Bourbon	lb.	5.15	6.50

Aromatic Chemicals

Acetophenone, C. P.	lb.	$1.75	$2.25
Amyl Cinnamic Aldehyde	lb.	3.50	4.25
Anethol	lb.	1.00	1.10
Benzaldehyde, tech.	lb.	.60	.65
U. S. P.	lb.	1.20	1.35
Benzyl, Acetate	lb	.60	.95
Alcohol	lb.	.80	1.30
Citral	lb.	2.10	2.40
Citronellal	lb.	1.75	2.50
Citronellol	lb.	2.50	3.50
Citronellyl Acetate	lb.	4.50	7.00
Coumarin	lb.	3.60	4.00
Cymene, drums	gal.	.90	1.25
Diphenyl oxide	lb.	1.10	1.20
Eucalyptol, U. S. P.	lb.	.60	.70
Eugenol, U. S. P.	lb.	2.25	3.00
Geraniol, Domestic	lb.	1.45	2.00
Imported	lb.	2.00	3.25
Geranyl Acetate	lb.	2.50	4.00
Heliotropin, dom.	lb.	2.00	2.50
Imported	lb.	2.50	4.00
Hydroxycitronellal	lb.	3.50	9.00
Indol, C. P.	oz.	2.50	5.00
Ionone	lb.	4.00	6.50
Iso-Eugenol	lb.	4.00	5.00
Linalool	lb.	1.95	3.25
Linalyl Acetate	lb.	2.40	3.15
Menthol	lb.	3.35	3.50
Methyl Acetophenone	lb.	2.50	3.00
Anthranilate	lb.	2.20	2.60
Paracresol	lb.	4.50	6.00
Salicylate, U. S. P.	lb.	.40	.45
Musk Ambrette	lb.	6.75	7.25
Ketone	lb.	6.00	7.50
Moskene	lb.	5.40	5.90
Xylene	lb.	2.75	3.00
Phenylacetaldehyde	lb.	4.75	7.25
Phenylacetic Acid, 1 lb., bot.	lb.	3.00	4.00
Phenylethyl Alcohol, 1 lb. bot.	lb.	4.25	4.50
Rhodinol	lb.	6.00	9.50
Safrol	lb.	.20	.22
Terpineol, C. P., 1,000 lb. drs.	lb.	.28	.30
Cans	lb.	.33	.34
Terpinyl Acetate, 25 lb. cans	lb.	.80	.95
Thymol, U. S. P.	lb.	1.50	1.75
Vanillin, U. S. P.	lb.	4.50	5.75
Yara Yara	lb.	1.60	3.00
Insect powder, bbls.	lb.	.18	.20
Concentrated Extract	gal.	1.50	1.70
Gums—			
Arabic, Amb. Sts.	lb.	.06	.06½
White, powdered	lb.	.10	.11
Karaya, powdered No. 1	lb.	.09½	.10
Tragacanth, Aleppo, No. 1	lb.	.75	.80
Sorts	lb.	.07	.08
Waxes—			
Bayberry, bgs.	lb.	.16	.18
Bees, white	lb.	.30	.33
African, bgs.	lb.	.13	.14
Refined, yel.	lb.	.20	.30
Candelilla, bgs.	lb.	.12	.13
Carnauba, No. 1	lb.	.23	.24
No. 2, Yel.	lb.	.22	.23
No. 3, Chalky	lb.	.12	.12½
Japan, cases	lb.	.06½	.06¾
Paraffin, ref. 125-130	lb.	.03⅜	.04⅛

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The biggest part of floor cleaning cost is labor. Unfortunately, buyers of scrubbing soaps often try to cut maintenance costs by using cheaper materials instead of checking up on the time and labor factors. The correct answer is *Better* soap and a *Modern* method of doing the job.

Soap solutions that are water soluble are sprayable. A series of tests on such solutions, using a compressed air sprayer for the application, have shown a time saving of 35 to 50 per cent as compared with mop application. Square foot coverage per gallon was also slightly in favor of the spraying method.

Here is a cut of the Hudson Junior Sprayer used in the testing work. All experiments were carried on under practical conditions. Tile, wood and composition floors were used as "subjects." The results were equally satisfactory in all cases.

Isn't it logical that a higher grade of soap, carrying a *better profit*, can be sold on the basis of total maintenance cost *when you offer the customer a 35 to 50 per cent saving in labor cost?*

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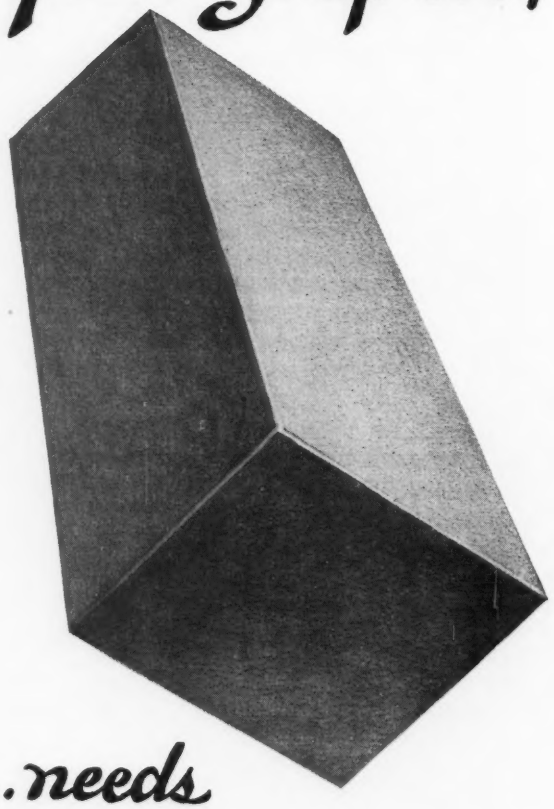

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Your Soap . . deserves to share the wholesome results of a marvelous Clarity . . the striking effects of a scientific union of your fixed formula, and our product . . first, laboratory-built then supported by factory processes.

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Say you saw it in SOAP!

Liquid Soap Clarification

(*From Page* 30)

good results. The rate also varies considerably with the viscosity of the soap. Naturally, a forty per cent soap will be much slower through the press than a fifteen per cent soap. For the smaller size presses, about one fifty gallon drum per hour is the correct rate for a forty per cent liquid soap. The larger presses have a proportionately greater capacity. The soap should leave the press at a temperature about 32 to 35 F.

The use of filter-aids, such as fullers earth and carbons, is helpful in giving greater clarity and brilliancy to the finished soaps. These can be used in numerous proportions according to the results desired. Not only do they lighten the color of the soap, but they build up on the filter cloths and improve the filtration. These filter-aids are added in the small tanks prior to the passage of the soap through the press. Where feasible, it is better to have a separate press for each type of soap or shampoo being run regularly in the plant. From the press, the soap is piped directly to vertical steel storage tanks from which it is filled into drums as required.

Another point of importance is the ageing of the soap prior to refrigeration. The soap as it comes from the kettle following saponification and finishing is pumped to storage tanks on an upper floor and there permitted to stand for several weeks at room temperature before it is flowed by gravity to the thousand gallon refrigeration tanks for its forty-eight hour treatment at low temperature.

The question may be asked why is it necessary to go to so much trouble to secure permanent clarity in a liquid toilet soap or shampoo. First of all, the appearance of a soap or shampoo if it is to be packaged in bottles or used in glass soap dispensers is very important. Cloudy or muddy soaps do not appeal. Brilliant, sparkling products do. Furthermore, a clear sparkling soap usually indicates a better made soap,—made of the right oils, properly saponified and finished, and free from a tendency to go rancid. It indicates that the manufacturer is supplying the right product. Otherwise, he would not spend the four cents per gallon, over and above other actual manufacturing costs, which this method entails to refrigerate and clarify properly his soap. And last, it is a protection against liquid soap "made in a barrel in the garage," as poorly made soaps cannot be clear and bright.

—o—

It is reported that four Russian whalers, three of which were built for the Soviet Government in Norway, are en route to the Bering Sea, via the Panama Canal. The home port of the vessels is apparently to be Vladivostok.

—o—

Exports of caustic soda from United States during August, 1932, totaled 8,207,235 lbs., worth $183,135, with Mexico and Brazil the two largest buyers each taking approximately a million and a half pounds.

COLUMBIA BRAND

98% - 100%
CAUSTIC SODA
76% Na_2O
Solid – Flake
Ground – Liquid

99% - 100%
SODA ASH
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Feather

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WHEN YOU NEED **SOAP MACHINERY** NEW OR USED

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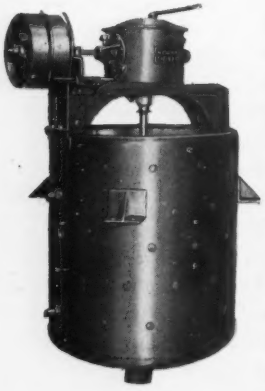
New Soap Crutchers



Here are illustrations of two of Newman's brand new all steel, steam jacketed SOAP CRUTCHERS. The CRUTCHER on the left can be used to crutch ANY kind of soap. The CRUTCHER on the right can also be used to crutch any kind of soap but is especially adapted for Crutching laundry soap. These are made in a complete range of sizes. Investigate our equipment and prices before placing your next crutcher order.

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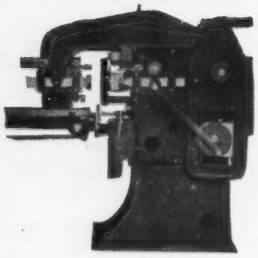
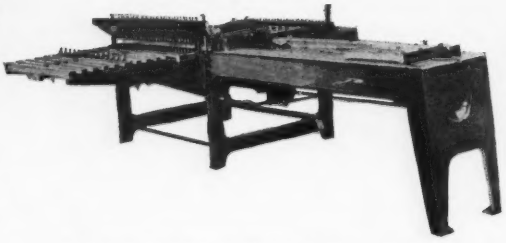
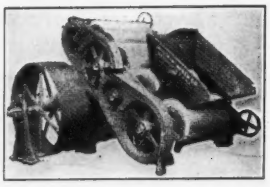


4 JONES AUTOMATIC combination laundry and toilet soap presses. All complete and in perfect condition.



2 Automatic Power Soap Cutting Tables.



H-A SOAP MILL

This 4-roll granite toilet soap mill is in A-1 shape. Latest and largest size rolls.

USED EQUIPMENT

- H-A 1500, 3000, 4000, 5000 lbs. capacity. Steam Jacketed Crutchers.
- Dopp Steam Jacketed Crutchers, 1000, 1200, 1500 lbs. and 800 gals. capacity.
- Ralston Automatic Soap Presses.
- Scouring Soap Presses.
- Empire State, Dopp & Crosby Foot Presses.
- 2, 3, 4, 5 and 6 roll Granite Toilet Soap Mills.
- H-A 4 and 5 roll Steel Mills.
- H-A Automatic and Hand-Power slabbers.

USED EQUIPMENT

- Sperry Cast Iron Square Filter Presses, 10, 12, 18, 24, 30 and 36 inch.
- Perrin 18 inch Filter Press with Jacketed Plates.
- Gedge-Gray Mixers, 25 to 6000 lbs. capacity, with and without Sifter Tops.
- Day Grinding and Sifting Machinery.
- Schultz-O'Neill Mills.
- Day Pony Mixers.
- Gardiner Sifter and Mixer.
- Proctor & Schwartz large roll Soap Chip Dryers complete.

USED EQUIPMENT

- Proctor & Schwartz Bar Soap Dryers.
- Blanchard No. 10-A and No. 14 Soap Powder Mills.
- J. H. Day Jaw Soap Crusher.
- H-A 6, 8 and 10 inch Single Screw Plodders.
- Allbright-Nell 10 inch Plodders.
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Oil-Fat-Soap
PRODUCTION SECTION
A section of SOAP devoted to the technology of oils, fats, and soaps, published prior to Jan. 1, 1932, as a separate magazine under the title, *Oil & Fat Industries*.

The Spray Process for Soap Powders

Nozzle and Rotating Disc Methods Compared

MANUFACTURE of soap powders by the spray process is gradually replacing the old grinding process. New installations for soap powder are generally spray towers. The advantage of lower cost of operation and marked increased production has been particularly responsible for the adoption of this method, especially for larger plants. Due to the comparative newness of the process and secrecy of manufacturers, little has appeared as yet in the literature. The technical details of the design and operation of the apparatus used in this process, particularly the spray nozzles and the spray tower, have been held more or less secret. It is therefore very interesting to learn of the appearance of a booklet, prepared from a series of articles in the *Seifensieder Zeitung* by Bert Thomas, in which the manufacture of soap powders by the spray process receives full discussion both from the theoretical as well as the practical standpoint.

Perhaps the most important factor in the manufacture of soap powder by the spray process, according to Thomas, is the condition of the air used for drying the spray in the tower. Careful attention to the control of temperature and humidity of the air used for this purpose is vital. External atmospheric conditions are likewise important. Calculations show that if the temperature of the air is 20 degrees C in summer and 5 degrees C in winter and if the air is heated in both cases to 30 degrees C before being used, only half the quantity of air used for removing 1000 grams of water in summer will be required in winter. This is a matter which must be taken into account in designing the size of the spray tower for a given daily production of soap powder.

The atomizer constitutes a highly important part of the spray process equipment. Its purpose, to produce as fine a mist as possible in the tower, must be effectively accomplished if the moisture in the soap powder is to be immediately absorbed by the warm air. Atomization of the powder is secured by means of spray nozzles, or horizontal discs rotating at high speed against which the liquid is fed from above.

A formula has been developed for the centrifugal force of the liquid centrifuged into the tower by means of high speed horizontal discs, which is useful in designing the latter. The formula is $P=(M.v^2)/r=G.v^2/g.r.$ P is the centrifugal force, M the mass of the substance, G the weight of the substance subjected to centrifugal force, g the acceleration of gravity, r the radius of the discs and v the peripheral speed at the circumference of the discs. When the weight of the substance centrifuged is increased thrice, the centrifugal force is likewise increased, but the speed v becomes nine times as large as P. On the other hand, if the radius of the disc is increased thrice, the value of P is reduced by one third.

When this method is used for atomizing the fluid soap, the saucer shaped discs of chromium steel, are located half way up the tower. The liquid is fed to the center of the discs from above. One of the principal advantages of this method of atomization is that the tower need not be built as high as in the spray nozzle method. A tower of about 16 feet diameter and 20 feet high is claimed to produce up to five tons of soap powder per hour.

Because of early patent restrictions on the disc, the more common method of atomizing the soap has become the spray nozzle process. The nozzle used must

be designed with special regard of the properties of the soap sprayed. The opening of the spray nozzle may be in the form of a slit, for example, an annular slit. The most useful form of spray nozzle was found to consist of an inner tube for feeding the liquid, surrounded by an outer tube to form an annular space between the two. The liquid is therefore forced through an opening in the middle of the nozzle while the compressed air is blown through the annular jacket between the two tubes. The air has a pressure of 6 to 8 atmospheres. The result is complete atomization and immediate drying of the emerging liquid. It is claimed that a very fluffy powder is obtained by this process.

The shape of the end of the inner tube of the nozzle, through which the soap is fed, is claimed to be responsible for this fluffiness. It is made in the form of a rectangle with rounded-off edges. Hence the surrounding outer circular tube forms with the inner tube an annular ring which is widened out at four points. This results in more intimate mixture of the compressed air with the soap and gives more uniform atomization. The air meets the stream of soap at an angle of 30 degrees. Furthermore, the current of air, as it leaves the nozzle, strikes the soap stream tangentially and follows a spiral path. A particular advantage of the nozzle over the rotating discs is that there are no moving parts.

The principal disadvantage of the nozzle is that it does not permit of much overloading. Thus, when designed in a certain size for a given production, it cannot be made to produce much more than the rated quantity. This is quite different with the rotating discs. Production can be easily increased in this case by increasing the rotating speed of the discs. Production is controlled in the nozzles simply by regulating the flow of soap to them.

The auxiliary apparatus required in a spray installation depends on the kind of soap powder made. Tanks or bins must be provided for the raw materials. These are fed into a mixing kettle. When one kettle is provided, the melted stock is discharged into a jacketed pressure vessel arranged under the kettle and the soap is forced therefrom into the nozzles. It is, however, better to provide two mixing kettles. Each is then used alternately for mixing the ingredients and for compressing the mixture before it is fed to the nozzles. Continuous operation is thus obtained.

The kettle must be of such size that the nozzles in the spray tower can handle its entire content within a maximum of 45 minutes. Proper mixing in the kettle, so that a homogeneous soap containing a small amount of water is obtained, is essential in producing a dry and fluffy powder. The mixing device in the kettle must scrape the bottom irrespective of the shape.

The speed of rotation of the agitator should not be less than 50 R.P.M. The pressure in the kettle need never be more than two atmospheres. This pressure is sufficient to move the finished soap to the spray nozzle and when it is higher than two atmospheres, the proper functioning of the nozzles is disturbed. Some operators have obtained good results with unjacketed kettles. On the other hand, open kettles must be jacketed and heated. A closed steam coil is located in the round bottom of the kettle.

Experience has shown that about 60 cubic meters of compressed air at eight atmospheres pressure are required for the production of 125 kilograms of soap powder per hour. The capacity of the compressor must be four cubic meters per minute for an hourly production of 500 kilograms of powder. The compressor size should be sufficient to allow a 20 per cent over load. The compressor feeds compressed air into a storage tank from which it is fed to the nozzles. Automatic regulation is provided for a tank pressure of eight atmospheres. When the compressor yields one cubic meter of compressed air per minute, the capacity of the storage tank must be about 2000 liters. The air is heated by passing through a series of small pipes which are surrounded by a steam heated jacket.

While other forms of apparatus have been used for manufacture of powder, the tower is the only one that has been found practical. It is claimed that spraying the soap into the tower from the bottom upward gives the best results. In some cases the soap is sprayed in at the top. The soap is sprayed in tangentially to the wall of the tower rather than at a suitable point in the periphery of the same towards the center. A current of air is blown in likewise tangentially between the soap stream and the walls of the tower so that the soap does not incrustate on the wall. In spraying the soap in from the bottom toward the top, the tower effect is doubled. the spray rising and falling by gravity. It is claimed that such an installation needs much less attention and is more efficient than one in which the soap is sprayed in from the top.

The height of the tower in the spray process is a minimum of 40 feet and is best not less than 50 feet, when the air pressure is eight atmospheres. The tower is generally round, although it may also be rectangular in cross-section. The lower end of the tower is made funnel-shaped so that the powder collects and is removed through a central opening. The angle of inclination of the sides of the hopper should be 60 degrees. The moist air is removed at the top through a rather large outlet, its large diameter serving to reduce the speed of the outflowing air to less than 10 meters per second. An impact plate is placed in front of this outlet so that too much of the atomized material, which is carried far up the tower by the compressed air, is prevented from being carried out of the tower by the outflowing air. The dry powder is removed from the bottom of the tower by means of a screw conveyor or on to a belt conveyor or another screw conveyor. Both have disadvantages but the belt conveyor is generally preferred, for it does not destroy the fluffiness of the powder as does the screw conveyor. The speed of the belt conveyor is 2 meters per second.

Due to certain intrinsic characteristics of the rotating disc process for atomizing the soap, the size of the air

heater required is larger than in the nozzle spray process. Furthermore in the latter process, the air both atomizes and dries the soap. It is estimated that 3,650 cubic meters of air are required for the production of 1,000 kilograms of soap powder. This refers to the worst possible conditions, that is in hot, humid weather. Half of this amount of air is sufficient in winter, but the plant should be designed for summer conditions so that the rated production can be obtained at all times.

If a production of 1,000 kilograms of soap powder per hour is required, then 36,500 cubic meters of air must be blown through the tower per hour or 10 cubic meters per second. The fan that supplies this air must have a capacity of 14 cubic meters per hour. It works under a vacuum of 180 millimeters. The extra capacity of the fan is required because the air has to pass through an air filter and air heater before it enters the tower. The air heater operates under a pressure of about 20 millimeters water and the filter under about 80 millimeters.

The air heater must be properly designed so that it will heat up the required flow of air per hour to the desired temperature. In order to obtain the desired heating effect under worst conditions, the air temperature at the start is assumed to be 10 degrees C and at the end 80 degrees C. Thus the air heater must be large enough to heat 36,500 cubic meters of air per hour from 10 to 80 degrees C. A calculation shows that this requires the transmission of 750,000 calories per hour.

A waste air filter must be provided. Otherwise the dust will scatter around the plant and cause trouble. Dust separators, cyclone separators, dust chambers and air filters are used. The cyclone separator works on the principle of substantial reduction in the speed of flow of air through the apparatus allowing the dust particles to settle. Unfortunately, even though the speed is greatly decreased by a large increase in the diameter of the air pipes, there is still insufficient time for a large part of the dust to settle and the air escapes still containing appreciable quantities of soap powder. Futhermore, in order to effect complete deposition of the dust in a dust chamber, the latter has to be made inconveniently large for handling large quantities of air. The space requirements make such chambers impractical.

The dust-sack filter has been devised to overcome these difficulties. The apparatus consists of long sacks made of tightly woven flannel with one rough side. The dusty air enters at the bottom of these sacks and is sucked through them. A vacuum is created outside the sacks by means of a fan which forces the air to pass through the flannel with the result that the dust is retained in the inside of the sacks. These sacks are very effective. Dust is no longer visible in the air at the fan outlet. The presence of dust in the air leaving the fan is detected only after long use of the sacks. The principal advantage of this apparatus is that it requires only a small sack to cleanse large quantities of air effectively.

In order to cleanse 36,500 cubic meters of air, a filtering surface of 365 square meters is required. A sack, 35 centimeters diameter and 5 meters long, has a filtering surface of 5 square meters. Hence 73 sacks are required. These are arranged in groups. It is illustrative of the dependence of one part of the soap powder installation on the other that a poorly designed air heater will materially affect the operation of the air filters. If the air is not heated to the proper temperature so that the soap powder is effectively dried, the wet dust in the waste air will clog the flannel sacks and interfere with their proper operation. The load on the filters is less when manufacturing powders of low soap content than when making higher grade powders and bleaching soda. The material of the filter bags should be fabric of best possible grade.

THE soap powder must be made by boiling. Cold process does not give a properly compounded product. A sample of the cold-made product will not feel smooth when rubbed between the fingers, but rough and sandy. Trouble will also be found in atomizing a cold mixture. The agitator must be kept running during boiling. As soon as a proper mixture has been obtained, the kettle is closed and steam shut off. Care must be taken to avoid too high a rise of temperature, as this results in the product being "burnt," which is later manifested in a yellowish-brown powder from the tower. The only time that steam is allowed to flow through the heating coil with the kettle closed is towards the end of the removal of the contents of the kettle to the nozzles. The agitator is then started and steam allowed turned into the kettle so that the last portion of the soap is completely removed.

The content of water in the soap must be as low as possible. The greater the viscosity of the fluid soap, and consequently the less water it contains, the more economical will be the operation of the spray tower. Nevertheless the mass must not be too viscous. Then it will not flow uniformly from the nozzles. It is absolutely wrong to try to overcome this condition by increasing the pressure on the soap. This will not help and merely hinder proper atomization. A much simpler method is to add more water.

The actual composition of the soap powder is also an important matter. The composition of the soap itself must be chosen to give best results on atomization. A pure curd soap, containing 15 per cent rosin, is claimed to be suitable. A stock containing 55 per cent palm kernel fatty acids, 15 per cent palm kernel oil (neutral), 15 per cent tallow fatty acids and 15 per cent tallow gives good results. The given proportions may be changed as required.

——o——

Salts of volatile acids are mixed with non-volatile acids or their acid salts. Addition of water causes the evolution of the volatile acid. These mixtures are used as disinfectants. Thus calcium hydrogen phosphate is mixed with aluminum chloride, calcium chloride and calcium permanganate. When the mixture is moistened, hydrochloric acid is evolved. Hans F. Kuisel. Swiss Patent No. 151,078, filed December 11, 1930.

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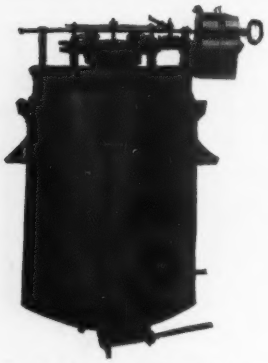
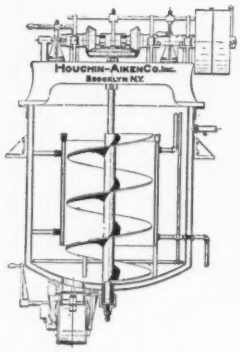


Perfection Crutcher
Sliding Gate Valve



Perfection Crutcher Cross
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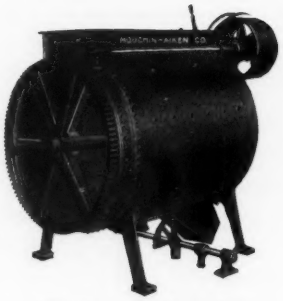
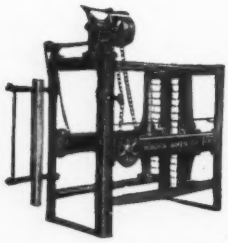


Horizontal Crutcher

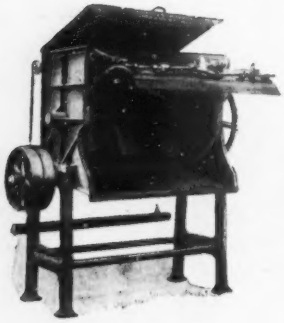
Empire State
Press

Standard
Soap Frame

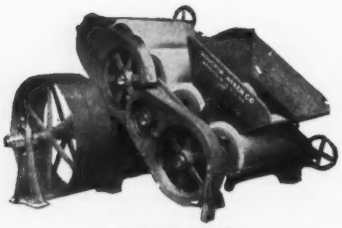


Automatic Power
Slabber

Automatic Power Cutting
Table



Ideal Amalgamator



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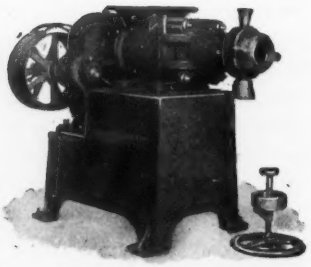

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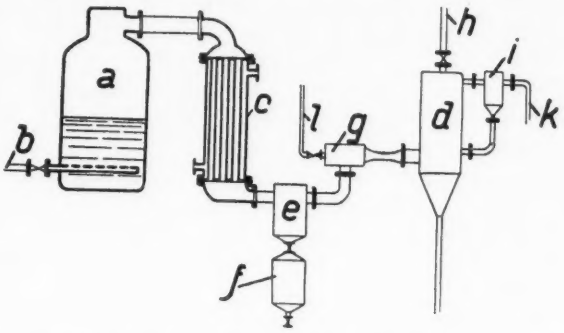
High Vacuum Fatty Acid Distillation

Steam distillation of fatty acids, glycerin and the like under a high vacuum avoids decomposition of the products. A new apparatus for carrying out this process and for providing a special steam spray compressor to create the required vacuum is described in German Patent No. 545,764. This compressor is located between the fatty acid and the steam condensers. A vacuum exists in the latter due to the condensing action of the cooling water. The new compressor produces a vacuum in the fatty acid condenser and in the still which is substantially higher than what can be obtained by means of the steam condenser alone.



The high vacuum avoids the distillation of odoriferous substances along with the fatty acids. The traces carried along mechanically are removed with the steam from the fatty acid condenser. The surprising fact is that the fatty acids can be easily condensed under this high vacuum. The fatty acid distillate is satisfactory in color and odor and also contains practically no unsaponifiable matter. The apparatus is economical to operate thermally. It is shown in the accompanying illustration.

The still is shown at (a) containing the mass to be distilled by means of steam fed through the pipe (b). The water-cooled, surface condenser (c) is connected with the still and is used to condense the fatty acids. The condensed acids are separated from the steam in the separator (e), the acids being removed through the tank (f). A steam jet compressor (g) is located between the fatty acid condenser (e) and the steam condenser (d). The object of this compressor is to increase the vacuum in the still (a) and the fatty acid condenser (c) over that in the steam condenser (d). Steam for operating the steam jet compressor is fed through the line (l). The exhaust steam from the compressor as well as the steam from the still is condensed in the condenser (d). Air is sucked out of the apparatus through the pipe (k) which is connected with a suitable air pump. The liquid separator (i) is inserted before the air outlet to remove any entrained liquid.

—o—

Mercury oxycyanide solution, mixed with benzyl alcohol or its salts, is used as a stable, non-corrosive disinfectant. The solution may also contain a protective substance, such as sodium bicarbonate. E. Merck. German Patent No. 551,543, filed November 8, 1930.

Evaluating Liquid Soap

The pure soap content is defined to be the sum of the fatty acid hydrates and the combined alkali and is designated as $(K - 1)$. The total fatty acids are determined by the ether method on a 10 gram sample of the liquid soap. The alkali equivalent is determined from the separated acids by boiling with excess 0.5 normal potash lye. The same method is used as in determining the saponification number. If for example 17.2 ccm. of 0.5 normal potassium hydroxide are required then $(K - 1) = (1.905 \times 17.2)/10$ or 3.28 per cent. The pure soap is the sum of 23.31 per cent fatty acids and 3.28 per cent alkali, making a total of 26.59 per cent. This method presupposes that the original soap contained no free fatty acids and no unsaponified fat. However, a correction must generally be made. For example, if it assumed that the original soap contained 0.9 per cent of free fatty acids and 0.5 per cent of unsaponified fat, then the following calculation is made:—$(0.0709 \times 0.9$ $0.0679 \times 0.5) \times 10 = 1.0$ Hence the latter result must be subtracted from the alkali equivalent, 17.2, giving 16.2 and the factor $(K - 1)$ is found to be 3.08 per cent instead of 3.28 per cent. $(1.905 \times 16.2)/10 = 3.08$ per cent. G. Knigge. *Seifensieder Zeitung*, 1932, page 589.

—o—

Composition of Oleo Oils

Examination of the glyceride structure of three oleo oils indicated that solid glycerides rich in stearic acid, that is palmitodistearins and tristearin, are segregated to a considerable extent into the oleostearin from pressed tallow, so that the fully-saturated components of the oleo oils are richer in palmitic and myristic acids than those of the original tallows. Correspondingly, the oleo oils as a whole contain more palmitic acid with myristic acid relatively to stearic acid than tallows. Nevertheless, the total amount of C_{18} acids, stearic, oleic, and linoleic, in the whole oleo oils is much the same, about 68 to 70 molecular per cent, as in many tallows. The results disclosed by these analyses are entirely consistent with what would be expected to happen as a result of partial mechanical separation of the mixed glycerides of whole tallows (in the form of a mixture of solid and liquid components) by the application of pressure. A. Banks and T. P. Hilditch. *Journal of the Society of Chemical Industry*, 1932, pages 111 to 114T.

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Animal and vegetable oils are refined by finely dispersing in the oil one per cent of water or water acidulated with two to five per cent of concentrated acid. The oil is first warmed to at least 60 degrees C before it is mixed with the water. The oil is then rapidly chilled to room temperature, within thirty minutes, whereby the phosphatides, mucilage, etc., settle out as coarse flakes. Addition of soda after chilling accelerates sedimentation and reduces the amount of oil entrained in the foots. I. G. Farbenindustrie A.G., Frankfurt-am-Main, Germany, British Patent No. 371,503.

Method for Free Alkali

A simplified method is proposed wherein the soap is dissolved in a mixture of 80 per cent propyl alcohol and 20 per cent glycol. Investigation has proven that the usual methods do not work when potassium soaps are being tested. The following method has been suggested for these soaps. 3 to 5 grams of soap are dissolved in 50-70 ccm. of 95 per cent neutralized alcohol under a reflux condenser, allowed to cool and mixed with 4-6 grams of anhydrous sodium sulfate. This is added carefully in small portions. Titration is effected using 0.1 normal alcoholic hydrochloric acid and phenolphthalein. The alcoholic hydrochloric acid is prepared by adding about 10 grams of HCl (specific gravity 1.19) to 1,000 ccm. of 95 per cent alcohol. The acid is titrated against tenth normal sodium hydroxide. Experience proved that a sharp color change could not be obtained without filtering. Decantation did not give a correct end point.

In order to determine the disturbance due to possible formation of soap gel and the effect of carbon dioxide, a neutral potassium soap of linseed oil fatty acids was prepared and tested. A sample of this soap was dissolved in alcohol and, after cooling, 10 ccm. of standard potassium hydroxide was added. The mixture was then filtered, washed three times with alcohol and titrated. A loss, which was believed to be due to carbon dioxide and possibly also acidity of the filter, was noted. The use of 80 per cent normal propyl alcohol and 20 per cent glycol mixture was found to give inaccurate results.

The method was modified so that 5 grams of soap were dissolved in 75 ccm. of absolute alcohol by warming on the water bath, using a reflux condenser and soda-lime tube on the flask. The solution is cooled when complete and 5 grams of pure, finely powdered sodium sulfate are added. The flask is restoppered and allowed to stand half an hour. The solution is filtered through a neutral filter, which must be covered with a watch glass during the operation. The residue is washed twice with absolute alcohol and titrated. Knigge. *Chemische Umschau*, 1932, pages 173ff.

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Fats, fatty oils and the like are purified by introducing liquids such as water, benzine, benzene, toluene, ethylene glycol or formamide beneath the surface of the material while the latter is being heated to above the boiling point of the introduced substance. This enables the removal by distillation of readily volatilizable substances from the difficultly volatilizable fats, oils, etc. The liquid, such as benzine, is introduced in the form of a capillary stream at a velocity of at least 40 cm. per second, and solutions of gases such as sulfur dioxide, ammonia, carbon dioxide or hydrogen or salts such as sodium carbonate, sodium bicarbonate, sodium bisulfate, sodium borate or phosphate or other substance, such as betanaphthalenesulfonic acid, formaldehyde, boric acid or hydrogen peroxide may also be used. I. G. Farbenindustrie A.G., Frankfurt-am-Main, Germany. British Patent No. 358,358, filed December 4, 1930.

Sulfonated Alcohols in Hard Water

One of the most important of the new developments in the manufacture of non-saponaceous detergents is the production of sulfonation products from higher molecular weight fatty alcohols. An important characteristic of these detergents is their behavior in hard water. New investigations have been carried out on the resistance of these products to lime salts. Thus when clear, warm solutions, containing from five to twenty per cent of the sulfonated alcohols, are introduced into water at ordinary temperature, the solutions obtained begin to become turbid after a few minutes. The turbidity increases steadily and precipitation takes place which is almost identical with the precipitation of lime soap. The intensity of the turbidity or precipitation depends on the degree of hardness of the water and on its temperature.

Tests made on various detergents of this nature have shown that they behave different. Many precipitate considerably and others very little. When the precipitated solutions are heated again, they become completely clear for the most part. Thus, it is concluded that at a temperature of 20 degrees C, the condensation product of the fatty alcohol with sulfuric acid is salted out by the lime content of the water, and this takes place more completely, the more lime is present, based on the like amount of sulfonate, and the lower the temperature of the bath. The magnesium salts, which are dissolved in the water, do not have such an action. It has also been found that phenols or cresols partially or completely counteract the precipitation of these condensation products due to the lime content of the water. The experiments on which these conclusions are based were carried out in the chemical-technical laboratories of Welwart in Vienna, Austria.

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Many methods but little experimental evidence are available in the literature on the analysis of candles. Accurate results were obtained with a new method based on considerable experimentation. Details are given of the procedure in saponification. The burets must be accurately calibrated and the one containing the alcoholic solution should be allowed to drain ten minutes before reading. Details are also worked out on the determination of the acid number. Results are interpreted. Francis W. Potter and Edward S. Hauber, *Industrial and Engineering Chemistry*, Analytical Edition, 1932, pages 289-290.

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Organic solvents are treated with aliphatic hydrotropes, with at least six carbon atoms, and soap to obtain a solvent or emulsifying agent for fats, oils, etc., suitable also for use as a foundation for soft soaps, insecticides, polishes, etc. The hydrotropes may also contain hydroxyl or amino groups. Thus $(C_2H_4OHNH_2)_2$ and tetralin are added to potassium oleate soap. Friedrich Steinfels & Co. Seifenfabrik, Zuerich, Switzerland. Swiss Patent No. 149,083.

ON PRODUCTS AND PROCESSES

New detergents, wetting agents, emulsifiers, etc., are made by esterifying aliphatic or aromatic sulfonic acids, containing at least one hydroxyl group and at least one primary or secondary amino group, with high molecular weight organic monobasic or dibasic acids, and simultaneously acylating the nitrogen group with monobasic or dibasic organic acids. For example such substances may be prepared by treating sodium gamma-chloro-beta-oxypropane-alpha-sulfonate with ammonia or a primary amine and then treating the product with two molecules of oleic acid chloride, with the result that one molecule of the chloride enters the amino or imino group and the second molecule the hydroxyl group. The products are highly useful for textile purposes. I. G. Farbenindustrie A.G., Frankfurt-am-Main, Germany. German Patent No. 552,759, filed July 1, 1930.

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Glycerol is determined in fatty oils by acidimetric titration. Four grams of the fatty oil are mixed with 70 ccm. of ligroin, and ten ccm. of glycerol lye (a mixture of glycerol and aqueous potassium hydroxide) are added. After mixing, the whole is centrifuged and the solution of the fatty oil pipetted off and made up to 100 ccm. with ligroin. Fifteen ccm. of this solution, now free from fatty acids, are added slowly (with stirring by a current of hydrogen) to three ccm. of sodium ethylate solution. The original article describes a method of preparing this reagent. After five minutes the whole is centrifuged and the precipitate is washed with ligroin by decantation and centrifuging. Then it is dissolved in 0.5 ccm. of water, and five ccm. of ethyl alcohol are added. The solution, which is also stirred with hydrogen, is titrated with tenth normal solution of hydrochloric, with phenolphthalein as indicator. H. Bull. *Tidsskr. Kjemi Berg.*, 1932, volume 12, pages 78 to 84.

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Anilin point is used to detect various adulterations of olive oil and butter fat. It is determined by neutralizing a measured quantity of liquid fat or filtered oil with 15 per cent sodium hydroxide at 60 degrees C and mixing the neutralized mass with an equal amount of normal benzene. Five ccm. are mixed with five ccm. of anilin and the anilin point is determined at 40 degrees C. C. G. Katrakis and J. G. Megaloikonomos, *Praktika*, volume 5, pp. 267-269.

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Three per cent solutions of sodium stearate and oleate contain colloidal particles which are visible under the ultra-microscope. But when the solutions are cooled to 20 degrees C, the sodium stearate solution gels and then contains closely interlocked needle crystals which gradually disperse when the solution is heated again. A twenty per cent solution of sodium oleate gels at 20 degrees C and then shows a similar structure to the sodium stearate solution. K. Boedeker. *Textilberichte*, 1932, volume 13, pp. 436-438.

—o—

The bad odor of fish oils, rendering them unsuitable for soap making, is due in part to the presence of amines from the decomposition of albumenoids, of certain unsaturated acids, oxidation products derived therefrom, lower fatty acids and their esters. The author proposes a method for the deodorization of fish oils based on the removal by distillation of the color together with odor-imparting substances. The operation is carried out in a special apparatus in the presence of a catalyst. The distilled fatty acids are sufficiently good in color for use in soap making. Engelhardt, *L'Industria Chimica*, 1932, page 909.

—o—

Polymerized semi-drying oils, train oils, etc., which can be used in the manufacture of hard soaps, are discussed from standpoint of properties and methods of production. Low temperature polymerization in the presence of a catalyst furnishes pale oils from which stable soaps can be made. C. Stiepel. *Chemische Umschau*, 1932, volume 39, pages 102 to 104.

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Soaps of improved detersive power are obtained by mixing ordinary soap with a salt of a sulfuric acid ester of higher aliphatic alcohols, such as sodium dodecylic-sulfate. The soap may contain soap builders, decolorizing agents and fat solvents. H. Th. Boehme A.G. French Patent No. 723,775, filed October 1, 1931.

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Stearin is prepared from highly hardened fats without pressing. Large scale experiments have shown that the fatty acids obtained by hardening palm oil or beef tallow to melting point about 58 degrees C and saponification by the autoclave process were similar in composition to commercial pressed stearins. This refers to the content of stearic, palmitic and isooleic acids in the stearin. F. Wittka. *Allgemeine Oel und Fett-Zeitung*, 1932, volume 29, pages 323-330.

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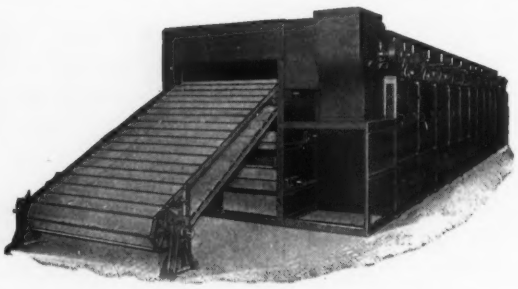
Products containing higher fatty acids and dispersed systems are prepared by treating saponifiable derivatives of the acids with less than one equivalent of a diamine, containing a tertiary amine group and a primary or secondary amino group. Then, if desired, the products are treated with alkylating agents and the alkylated

The Sargent Three Swing Shelf Conveyor progressive stage

CHIP SOAP DRYING MACHINE



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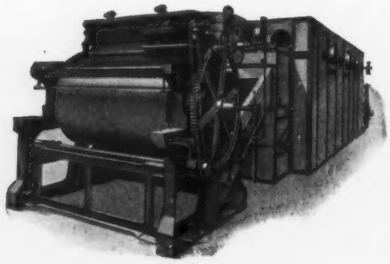

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This new Proctor Dryer produces Soap Chips of transparent thinness—exactly the kind now in popular demand for package laundry soap—also the chip that can be produced most efficiently in making cake toilet soap.

New throughout—new chilling rolls—new dryer, this machine not only produces the most satisfactory soap chip, but it excels in high capacity, saving of floor space, reduced steam consumption, low cost of operation. Write.

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products are introduced into suitable liquids. Thus, castor oil is heated for four hours at 180 to 200 degrees C with a symmetrical diethylethylenediamine. The product is methylated with dimethyl sulfate to give an oily product which gives a very fine emulsion in water. Societe Anonyme pour l'Industrie Chimique a Bale, Switzerland. French Patent No. 726,609.

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Purifying Glycerin Solutions

Glycerin, prepared by splitting or saponification, contains organic impurities which include lower members of the fatty acid series soluble in water, the alkali salts of which, together with those of oxidized fatty acids, which are difficult to salt out. There are also vegetable mucilage and albumenoids. The chief inorganic impurities are sodium chloride, which cannot be removed in the preliminary stages, mineral acids, alkalies, sulfates, etc., which can be removed by precipitants. If the glycerin liquor is alkaline, it is made slightly acid to decompose the soaps. Then it is treated with calcium or barium hydrate and aluminum sulfate. The sulfate is useful for flocculating organic impurities, as the gelatinous aluminum hydrate carries down dirt and finely dispersed material. Calcium and barium hydrates remove fatty acids in the form of insoluble soaps. While treatment with lime is cheaper, barium hydrate possesses advantages due to less solubility of its compounds. Barium carbonate is cheaper than barium hydrate, but its use involves vigorous agitation when it is used for the removal of sulfuric acid.

After the acid is removed with either of the alkaline earth hydrates, sufficient base is added to give a slight alkaline reaction. Aluminum sulfate is now added in carefully regulated quantities, until the test shows no further precipitation on addition of more sulfate. The glycerin liquor can be filtered between the two operations of addition of alkali and aluminum sulfate. Final purification may be best accomplished by adding barium hydrate to remove the sulfates. The final operation is carried out with slaked lime, when calcium hydrate is used in the first stages. The lime is then removed by ammonium oxadate, the ammonium sulfate produced not showing as ash in the analysis of the glycerin. Zinc sulfate has no advantage over aluminum sulfate in the purification of glycerin. Schlenker. *Chemische Umschau*, 1932, page 28.

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Sodium Cholate in Soap

(*From Page* 27)

aqueous soap solution, containing a little ammonia, is used to freshen and clean tapestries, upholstery, and dresses. Very stubborn grease and tar stains are removed by rubbing the spots with a few drops of benzine or oil of turpentine. Then the gall-extract soap is smeared over the spots and washed out with water. When gall-extract soaps are used in boiling wash, then both soap and oxygen (when washing compounds containing oxygen compounds are used) are economized. The wash comes out white and the textile fiber is protected from injury.

The protective action of sodium cholate is shown by the following strength test. Wool skeins were treated in a bath, containing 5 grams of sodium carbonate per liter at a temperature of 65 to 70 degrees C. The treatments were repeated five times and lasted 20 hours each time, making a total of 100 hours. In one bath, there was no sodium cholate and in the other 0.25 gram of sodium cholate per liter. The following results were obtained.

	Average Strength	
Before treatment	2312 grams	100 per cent
After 100 hours without sodium cholate	1767 grams	76 per cent
After 100 hours with sodium cholate	2090 grams	90 per cent

The results prove that the life of the textile fiber, which was treated in a solution containing sodium cholate, was approximately 2.5 times that of the fiber washed in a sodium carbonate liquor containing no sodium cholate.

Textile Applications

AS may be seen from the above, sodium cholate is very well suited for textile use. The stalagometer shows that an astonishingly small quantity of sodium cholate can reduce the surface tension of the solution to a considerable degree. Furthermore, sodium cholate is advantageously employed to convert substances into colloidal form, to increase the solubility of difficultly-soluble dyestuffs, to facilitate the finish-dyeing of fabrics which are difficultly penetrable to the dye liquor, to diminish the intense action of the bleach liquor and to accelerate bleaching. One part of sodium cholate replaces four to six parts of turkey red oil in foam dyeing, and in brightening cotton, wool and silk.

The use of sodium cholate in the cosmetic industry is limited by its brownish color and its bitter taste. These disadvantages are, however, unnoticeable when very small percentages of sodium cholate are used, that is about 0.1 per cent. On the other hand, sodium cholate is perfectly effective in this small concentration. Sodium cholate is harmless, and cosmetic preparations, which contain it and which come into contact with wounds, do not injure them. Soaps, containing sodium cholate, have a markedly pleasant sensation on the skin. An especially welcome property of sodium cholate is its tendency to make the hair and also the beard soft. It is, therefore, advantageously employed in making toilet soaps (especially soaps containing oxygen compounds and borax), shampoo powders, shaving lotions, shaving creams, shaving soaps and shaving powders. It is also used in hair washes and tonics. It increases the solubility of cholesterin and lecithin. Both the old as well as the more modern formulæ for making cholesterin hair tonics and brilliantines recommend the use of oxgall. The latter is, however, replaced by sodium cholate to better advantage.

Which Lasts Longer, — —

A LITTLE SQUEEZE, *or*

A BIG HUG?

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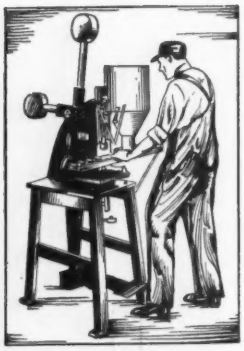
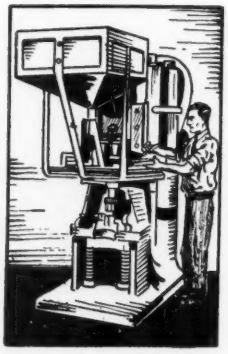
LITTLE SQUEEZE



Ordinary methods simply mould *blocks into shape. Perfumes quickly die.*

BIG HUG



80-ton pressure stamps each Fuld Deodorant Block. The perfumes last.

●

PACKED UNDER YOUR OWN LABEL

FULD BROS. INC.

ALPINE CHEMICAL COMPANY

2308-2310 Frederick Ave. Baltimore, Md.

SANITARY CHEMICALS TO THE JOBBING TRADE

Say you saw it in SOAP!

POWCO BRAND
REG. U.S. PAT. OFF

Pyrethrum Products

The essence of POWCO BRAND service is, and always has been, *killing power* value—without which no insecticide can meet today's intense competition.

The only "yardstick" that has any real meaning for you is *killing power* content, and this is indisputably proven by the biological test on insects.

We maintain test facilities for the convenience of our customers. This means that we are ready at any time to demonstrate to you that our products give a high standard of *killing power*, dependable uniformity, and real value for your money.

We offer a complete line of highly concentrated Pyrethrum extracts that are the result of more than five years of experimental and practical research.

JOHN POWELL & CO., INC.

Specialists in Pyrethrum Products

114 E. 32nd Street, New York, N. Y.

To Manufacturers who want NEW PACKAGE APPEALS for Greater Sales in 1933....

NO matter what the nature of the product, or in what kind of a container it is packed . . . it will pay any manufacturer anxious to increase sales in 1933 to read every word of this advertisement.

Competition, admittedly keen today, is bound to be keener tomorrow. Products—prices, distribution methods and merchandising plans certainly need some adjustment. Packages will have to do more than safely contain—they must do a real selling job.

In the past year — the last few months, yes, even in the last few weeks, there have been tremendous advances in packaging and design. Are you sure you're familiar with them all? Will your present containers be able to keep pace with the fast changing tempo of this era of package merchandising?

To any manufacturer who is not absolutely sure as to the fitness of his containers in meeting the 1933 packaging standards, we suggest a careful analysis be made at once.

First find out how your present container compares with those your competitors are using. Then cultivate a group of actual buyers of your products. Get from them first hand, their reactions to your packages. Consider carefully the many new types of containers on the market—compare yours with them. Investigate also the sales possibilities of a new design for your containers.

Finally, don't change your packages for the sake of just a change, and don't let fear of change keep you from making constructive improvements in your packages.

Unquestionably, but few manufacturers have all the necessary experience and facilities for solving the hundred and one perplexing problems that enter package improvement. Yet, a 3¢ stamp or a telephone call is all any manufacturer need risk to enable him to make a quick start towards package improvement.

A request to the nearest Continental Sales Office will bring in consultation a representative skilled in serving manufacturers, who are anxious to increase sales by better packaging.

And at Continental your problem receives first of all, the benefit of knowledge and experience gained through over a quarter century of helping to solve the package problems of many diversified businesses.

Whether your products be liquids, paste or dry, there are available cans in many different sizes, shapes and styles—all widely adaptable, thoroughly protective and economical—making the choice of the *right* container for your needs an easy one.

Research Laboratories, completely equipped with modern facilities, have available a large staff of highly trained specialists ready to solve that part of your package improvement requiring scientific study.

The men in the Development Department study your problem to see whether an entirely new package idea, or whether, perhaps, only an improvement on your present container is needed to put your product ahead of competition.

Specialists in packaging design make constructive analysis of your designing problem from every angle. They'll offer suggestions for improving your design or for an attractive new arrangement in eye-compelling colors.

That's a packaging service that you can't afford to overlook. Year in and year out—it has been extremely profitable for large and small manufacturers alike . . . it should be of equal service to you.

When there is so much to be gained, at no risk—it will pay you to See Continental First.

• • •

Continental Can Co., Inc.

NEW YORK CHICAGO SAN FRANCISCO

Will you risk a 3¢ stamp or a telephone call for real packaging help....

• • •

Baltimore, Md., 3500 East Biddle St., Wolfe 9700
Boston, Mass., 131 State Street, Hubbard 7172
Chicago, 4622 West North Ave., Spaulding 8480
Cincinnati, 2510 Highland Ave., Jefferson 2201
Denver, Colo., 3033 Blake Street . . . Tabor 4261
Detroit, 1900 East Jefferson Ave., Fitzroy 3292
Houston, 2nd National Bank Bldg., Preston 8674
Kansas City, Mo., Gulnotte & Lydia Aves. Victor 7250
Los Angeles, 3820 Union Pacific Ave., Angelus 7111
Nashville, Tenn., 500 Benton Ave., Phone 6-6682
New Orleans, La., 521 North Scott St., Galvez 4145
New York City, 100 E. 42nd St., Ashland 4-2300
Omaha, Neb., 8th and Dodge Streets, Omaha 1387
St. Louis, Mo., P. O. Box 1242 . . . Bridge 3550
Wheeling, W. Va., Hazlett Ave. & 8th St., Warwood 760

Say you saw it in SOAP!

HERE'S GOOD NEWS, MEN!

"We've added some new Clifton items to our line that will help put sales up where they belong."

IT'S popular these days to try various methods to boost sales. One method that has been successful with sanitary supply jobbers is to ADD a few suitable Clifton items to the present line.

Try this *proven* method. It will enable your salesmen to frequently make extra sales to their regular customers and encourage them to go out after new business too.

Even if you already handle similar items we can probably save money for you—we are doing so for many others. It costs nothing to inquire!

Foamwell Liquid Soap
Liquid Soap Concentrate
Liquid Soap Base
Soap Dispensers
Metal Polish

Pine-Gloss Floor Cleanser
Meteor Oil Soap
Cresolene Disinfectant
Pine Tree Disinfectant
Cresol Compound U. S. P.
Insecticide

Deodorette Cakes
Moth-Di Cakes
and Displays
Fragrantaire Blocks
and Wall Containers

ATTRACTIVE IMPRINT LABELS FURNISHED

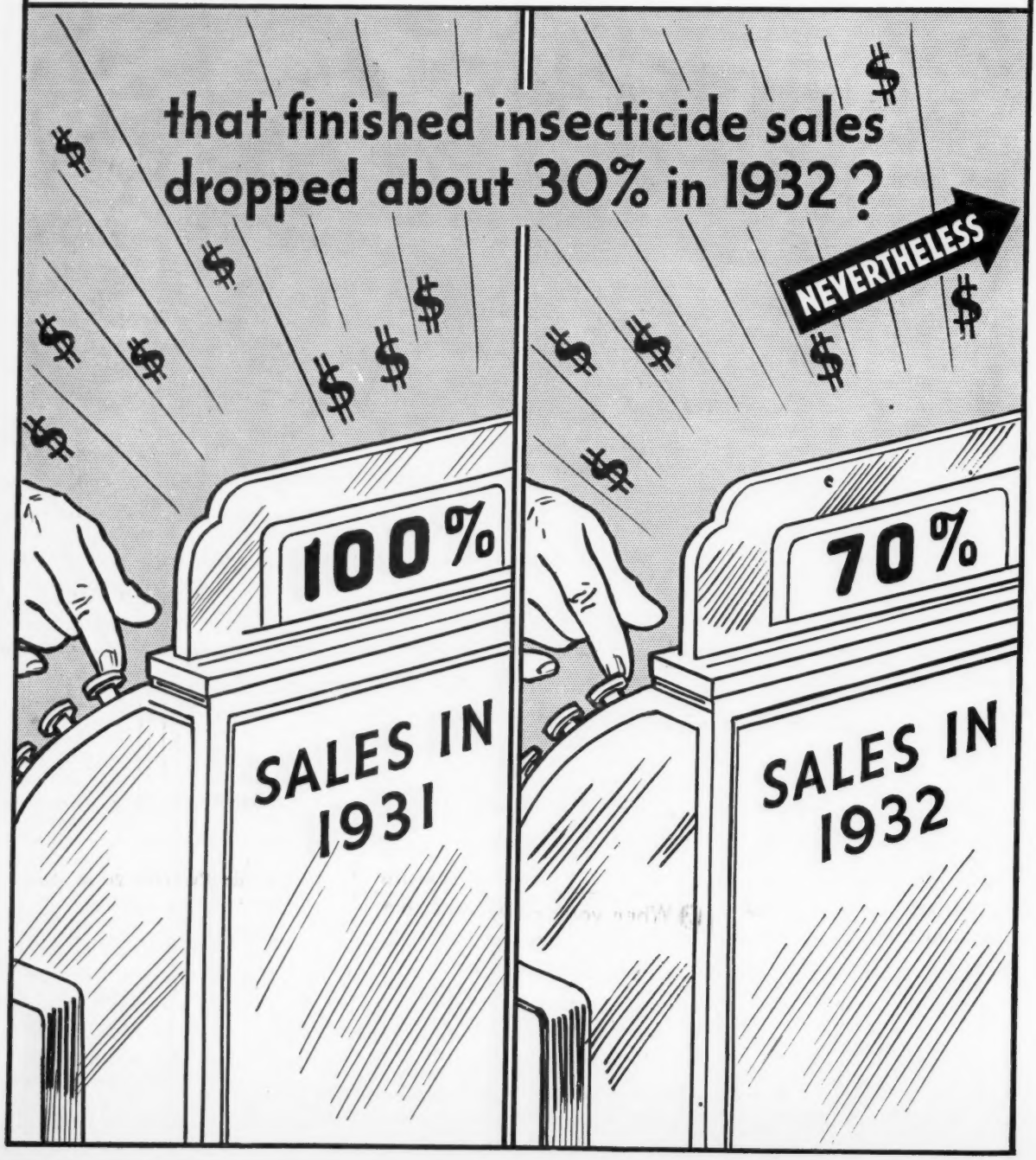
The Best Time to Boost Sales Is Now—Write NOW!

CLIFTON CHEMICAL CO., INC.

Clifton Building

246 FRONT STREET NEW YORK CITY

DO YOU KNOW . . .



UNIFORM KILLING POWER

Say you saw it in SOAP!

Pyrocide 20 Sales INCREASED 50% in 1932!

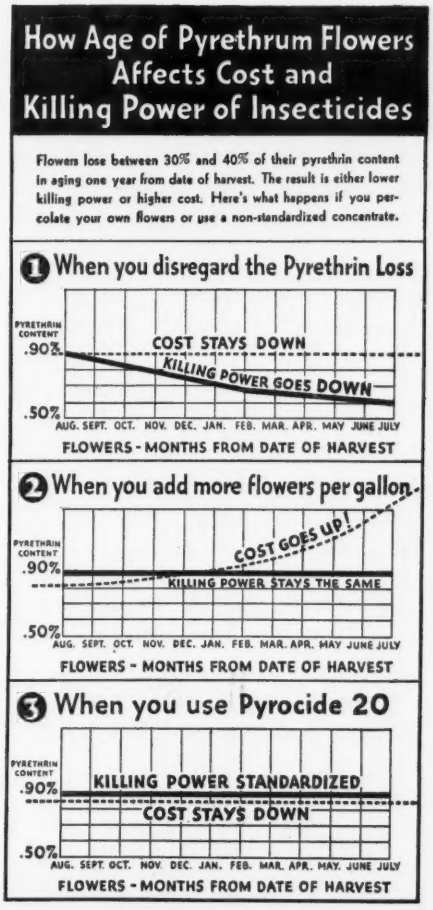
BECAUSE of an unusual scarcity of flies and mosquitoes this year and due to economic conditions, it is estimated that sales of finished insecticides have fallen off from 30% to 50%. Yet the volume of Pyrocide 20 purchased by the trade is 50% greater than in 1931, a year when we used one-third of all the pyrethrum flowers imported into this country!

The significance of this remarkable fact is unmistakable. Insecticide manufacturers have discovered that it *does* pay to use a *standardized* pyrethrum extract. Experience has shown them that insecticide users demand high, uniform killing power. . . that variation in killing power turns customers away.

You are sure of getting high, uniform killing power with Pyrocide 20—not only for a few months, but for every day you use it throughout the entire year. Here's why this fact is most important to you.

Aging Flowers Lose Power

It has been definitely proved that in aging, pyrethrum flowers lose as much as 20% of their killing power within the first six months. After a year in storage this loss amounts to between 30% and 40%. Unless the extract you use is standardized to counteract this loss, your finished insecticide is bound to show a marked variation in killing power. This variation may be as great as 300%.


How Age of Pyrethrum Flowers Affects Cost and Killing Power of Insecticides
Flowers lose between 30% and 40% of their pyrethrin content in aging one year from date of harvest. The result is either lower killing power or higher cost. Here's what happens if you percolate your own flowers or use a non-standardized concentrate.
1 When you disregard the Pyrethrin Loss
PYRETHRIN CONTENT
.90%
.50%
COST STAYS DOWN
KILLING POWER GOES DOWN
AUG. SEPT. OCT. NOV. DEC. JAN. FEB. MAR. APR. MAY JUNE JULY
FLOWERS - MONTHS FROM DATE OF HARVEST
2 When you add more flowers per gallon
PYRETHRIN CONTENT
.90%
.50%
COST GOES UP!
KILLING POWER STAYS THE SAME
AUG. SEPT. OCT. NOV. DEC. JAN. FEB. MAR. APR. MAY JUNE JULY
FLOWERS - MONTHS FROM DATE OF HARVEST
3 When you use Pyrocide 20
PYRETHRIN CONTENT
.90%
.50%
KILLING POWER STANDARDIZED
COST STAYS DOWN
AUG. SEPT. OCT. NOV. DEC. JAN. FEB. MAR. APR. MAY JUNE JULY
FLOWERS - MONTHS FROM DATE OF HARVEST

Pyrocide 20 is guaranteed to contain 2.15 grams of pyrethrins per 100 cc. or, expressed in percentage, 2.6% pyrethrins. It is not simply a 20-lb. extract. If flowers used in the manufacture of Pyrocide 20 contain less than .90% pyrethrins when percolated, it may be necessary to use as much as 26 lbs. to the gallon in order to maintain the guaranteed pyrethrin content.

Pyrocide 20 Costs No More

Pyrocide 20 is the original standardized pyrethrum concentrate. It gives you absolute standardization—at less cost than if you made your own extract. The price per gallon may be slightly higher than that of ordinary concentrates, but the cost per unit of pyrethrin content is many dollars less.

We ship Pyrocide 20 in steel drums containing 5, 10, 15, 30 and 53 gallons from warehouses in New York, Los Angeles, Minneapolis and many foreign cities. We can also furnish you with pyrethrum flowers of known pyrethrum content—in whole, ground or powdered form.

Write today, McLAUGHLIN GORMLEY KING CO., 1715 Fifth Street S.E., Minneapolis, Minnesota

Pyrethrum Specialists Since 1901

PYROCIDE 20

STANDARDIZED EXTRACT OF PYRETHRUM FLOWERS

Say you saw it in SOAP!

$92.50

Complete Mixer and Filter and Filler Equipment

Consisting of Glass-lined tank with electric Mixer... $65.
Vacuum asbestos disc Filter... $15
and Improved hand Bottle Filler $12.50
..... Total $92.50

Consult with Alsop district Representative

Baltimore
Boston
Chicago
Cincinnati
Detroit
Kansas City
Los Angeles
Minneapolis
New Haven
Philadelphia
San Francisco

or Write to Head Office at 39 West 60th Street — Insecticide Division — New York, N. Y.

ALSOP ENGINEERING CORP.

Manufacturers of electric filters, asbestos discs, portable electric mixers, pumps, electric bottle fillers and glass-lined tanks

Say you saw it in SOAP!

Effective Extermination *plus* SAFETY!

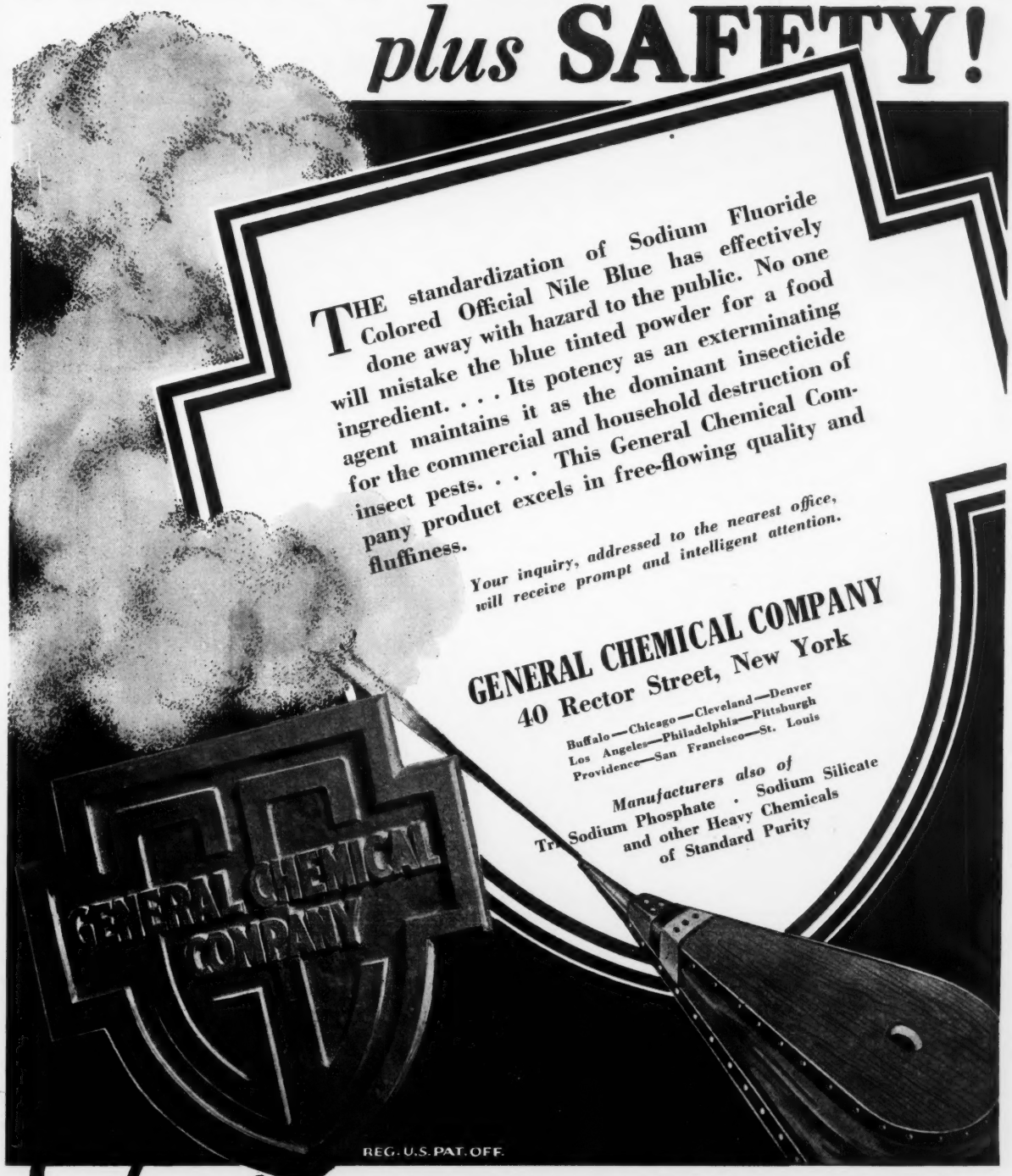
THE standardization of Sodium Fluoride Colored Official Nile Blue has effectively done away with hazard to the public. No one will mistake the blue tinted powder for a food ingredient. . . . Its potency as an exterminating agent maintains it as the dominant insecticide for the commercial and household destruction of insect pests. . . . This General Chemical Company product excels in free-flowing quality and fluffiness.

Your inquiry, addressed to the nearest office, will receive prompt and intelligent attention.

GENERAL CHEMICAL COMPANY
40 Rector Street, New York

Buffalo—Chicago—Cleveland—Denver
Los Angeles—Philadelphia—Pittsburgh
Providence—San Francisco—St. Louis

Manufacturers also of
Tri-Sodium Phosphate · Sodium Silicate
and other Heavy Chemicals
of Standard Purity



Colored OFFICIAL NILE BLUE
SODIUM FLUORIDE

Say you saw it in SOAP!

FLORENE

a sharp, clean, refreshing scent which covers kerosene odor . . . for fly sprays and insecticides.

a powerful low priced deodorizing oil, for use alone or in combination, in sprays and polishes.

PARAtints

to perfume and color naphthalene and paradichlorobenzene blocks or crystals . . . and bath salts.

GIVAUDAN-DELAWANNA INC.

80 FIFTH AVENUE, NEW YORK, N. Y.

Say you saw it in SOAP!

Baird's

Certified Coal-Tar Disinfectants

are known and used throughout the world because of their quality, dependability and efficiency. They are supplied only in concentrated form, dilute readily with water to form rich, milky emulsions, which do not separate on standing, and have a good clean odor of tar. Each batch is tested for germicidal strength.

Cresol Comp. U. S. P.

also known as Liquor Cresolis Compositus, U. S. P., is made in exact accordance with the specifications of the U. S. Pharmacopoeia. Phenol coefficient 2½ to 3. Dilutes with water to form clear, amber-colored solutions. Largely used by the medical profession, hospitals and veterinarians.

Crestall Fluid

is similar in composition, appearance and odor to Cresol Compound, U. S. P., but prepared from refined cresylic acid as a base. Approximately twice as strong as the U. S. P. product, and very effective in preventing the spread of animal diseases. Approved by U. S. Bureau of Animal Industry.

Mosquito Larvaecide

A coal-tar product employed for killing mosquito larvae. Effective in dilutions of 20,000 to 40,000 to one. Superior to petroleum oil, as it is not affected by rainfall or wind and does not involve fire hazard.

Pes-Tox Insecticide

of the pyrethrum type, pleasantly scented. Quickly kills practically every type of crawling, flying and hopping insect. Light lemon color. Especially effective when used in the form of a spray.

Pine Oil Disinfectant

A fragrant pine product, made from pure steam-distilled pine oil according to the formula of the Hygienic Laboratory of the U. S. Public Health Service. Mixes freely with water to form good white emulsions with pleasant pine odor. Free from mineral oil or other adulteration.

BAIRD & McGUIRE, INC.

Holbrook, Mass. St. Louis, Mo.

New York City and New Jersey Representatives:

Eastern States Supply Company, 136 Liberty St., New York City

Telephone WOrth 2—3143.

PERFUMES *for* SPRAY PRODUCTS—

OUR line of perfume odors for fly and theatre sprays, para blocks, household insecticides and allied products has been *laboratory tested.* By designating a perfume as a *spray odor,* we are certifying that it has been tested and proven successful both as to covering power and odor value. Try us out. Send a sample of your product—unperfumed—expressing a preference as to perfume if desired.

UNCO WATER-KLEER perfumes—a new series of perfume compositions, treated by a special process rendering them completely soluble in water without the use of alcohol. Simply dilute them in distilled water. They will not cloud or separate.

All types $2.75 per pound

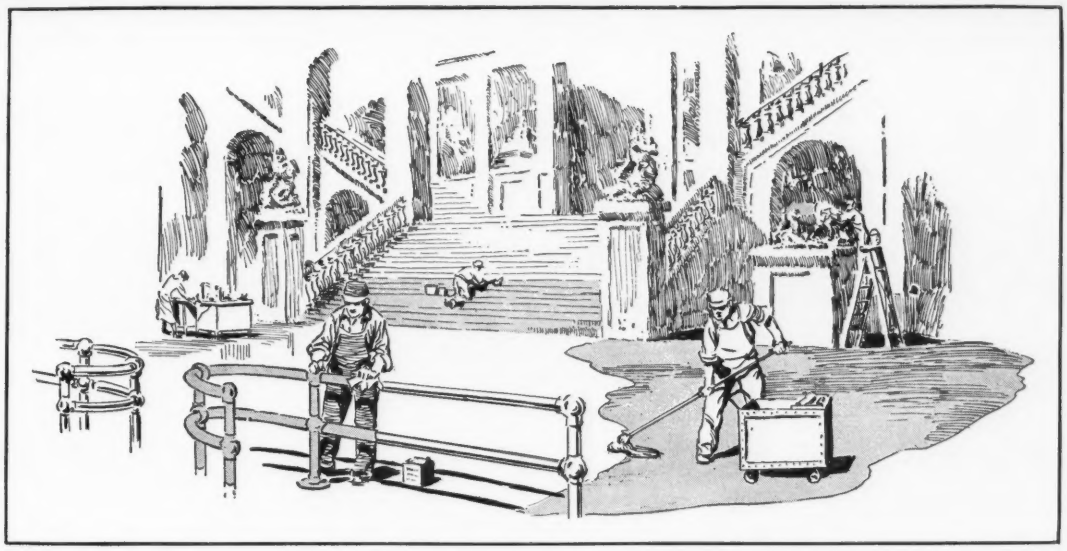
A Few Suggestions

BOUQUET
CARNATION
FLORAL
FOUGERE
HONEYSUCKLE
JASMIN
LAVENDER
LILAC
ORANGE BLOSSOM
ORIENTAL
ROSE
TREFLE

UNGERER & CO.

13-15 West 20th Street
NEW YORK

Say you saw it in SOAP!



YARMOR—HELPS BOTH LIQUID AND POWDERED SCRUBBING SOAPS

Whether in liquid or powdered form, scrubbing soaps containing Hercules Yarmor Steam-distilled Pine Oil are noted for their cleansing and disinfectant properties. These liquid soaps are best for washing tile, linoleum, rubber composition, and cement floors, and for cleaning metalware, windows, sinks, and bathtubs.

The powdered scrubbing soaps are recommended for heavier duty such as cleaning garage and factory floors, and machinery where oil and grease accumulate.

These soaps clean, disinfect, and deodorize most efficiently.

Return the coupon at the bottom of this page.

Steam-distilled Wood Turpentine
Wood Rosin
Steam-distilled Pine Oil
Alpha Terpineol
Commercial Abietic Acid
Abalyn
Nitrocellulose
Chemical Cotton

HERCULES NAVAL STORES

HERCULES POWDER COMPANY
INCORPORATED

961 Market Street....Wilmington, Delaware

Branch Offices...Chicago...New York...St. Louis...Salt Lake City...San Francisco

Hercules Powder Company, 961 Market Street, Wilmington, Delaware.

Please send a sample of Yarmor Steam-distilled Pine Oil ☐

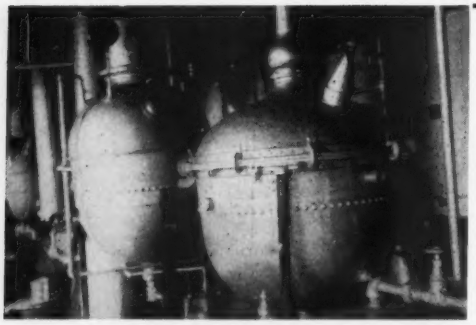
Please send information regarding Yarmor Steam-distilled Pine Oil for liquid and powdered scrubbing soaps ☐

Name..... Company.....

Street..... City..... State.....

QQ-28

Say you saw it in SOAP!



A SECTION OF OUR VACUUM STILLS WHERE PYREFUME IS MANUFACTURED

CONCENTRATED PYREFUME

A CONCENTRATED EXTRACT REPRE DOUBLY TESTED FLOWERS

Not only do we doubly test the flowers from which PYREFUME SUPER 30 is made—but WE TEST THE FINISHED PRODUCT and STANDARDIZE IT to contain 3.375 gms. of total pyrethrins in each 100 cc.

PYREFUME SUPER 30 thus produces (when diluted 1 part with 29 parts of the usual petroleum distillate) a spray of standard strength, representing one pound of DOUBLY TESTED flowers to the gallon.

PYRETHRUM

DOUBLY

1. For Its Pyrethrin Content—

A Scientific Chemical Analysis of Accurate Valuation.

Both the chemical and physiological tests have their adherents among leading manufacturers. To give buyers double protection, S. B. Penick & Co. apply both tests. The security of knowing that the pyrethrum you use has passed all accepted tests can be obtained without adding to your purchase cost.

1 2 3 4 5

LABORATORY INVESTIGATIONS

Showing Relationship Between the Stages of Development of Flowers and Pyrethrin Content.

Taking 100% as the basis for estimation

No. 1 represents full Pyrethrin content.
No. 2 are about 5% deficient in Pyrethrin content.
No. 3 are about 3% excess in Pyrethrin content.
No. 4 represents about 4% excess in Pyrethrin content.
No. 5 represents about 5% excess in Pyrethrin content.

WRITE US FOR PRICES—

S. B. PENICK

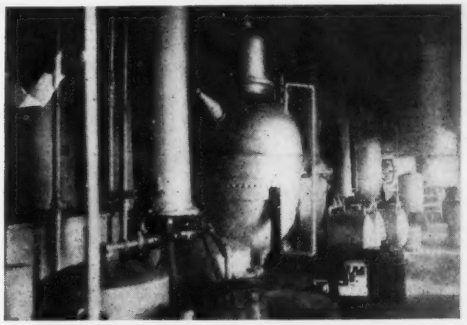
INSECTICIDE

132 NASSAU STREET,

Say you saw it in SOAP!

PYRETHRUM EXTRACT

SUPER 30



ANOTHER BATTERY OF VACUUM STILLS WHERE PYREFUME IS MANUFACTURED

SENTING 30 POUNDS OF STANDARD QUALITY TO THE GALLON

Flowers may vary in their yield, causing a similar variation in the strength of the insecticide produced from them. A spray made from PYREFUME SUPER 30 never varies, maintaining at all times a uniform and exceptionally high strength, which guarantees a maximum fall and kill.

Our method of *chemically standardizing* the finished product is the last word in pyrethrum extract manufacture.

POWDER

TESTED

2. For Its Physiological Action—
Supplementing and Verifying the Chemical Test

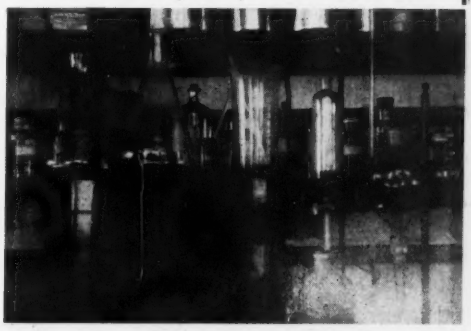
Contracts for 1933 requirements may be placed advantageously now at present favorable prices, protecting the buyer against the possibility of advances as the consuming season progresses. In standardizing on S. B. Penick Co. pyrethrum, you are always sure of receiving freshly m lled flowers. We have no carry-over stock, but keep fresh importations of flowers coming in at regular intervals. Our mills are constantly turning out powder to supply the demand.

ON CONTRACT OVER 1933

& COMPANY

SPECIALISTS

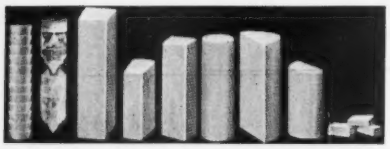
NEW YORK, N. Y.



SECTION OF OUR LABORATORY WHERE PYRETHRUM FLOWERS ARE TESTED

Say you saw it in SOAP!

BIG profits WITH THIS PROVEN LINE OF SANITARY SPECIALTIES



AIR PURIFYING BLOCS

Produced by the pioneers and original patentees of moulded blocs. Hard uniformly perfumed blocs made of 100% para and finest essential oils. In sizes and shapes to fit any containers. Colors and odors to meet current demand. Packed for you under your private label if desired. Also Urinal Blocettes individually wrapped in cellophane and Deodorizing Crystals in bulk or packed in handsome lithographed tins with or without our name.

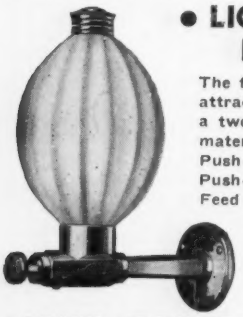
• BLOC CONTAINERS

Neat distinguished perforated containers, made of 24 gauge heavy metal—equipped with lock and sliding back.

In White Enamel, Porcelain, Oxidize or Nickel Plate with your nameplate or plain.

In three sizes:—

Large 3¼" x 3¼" x 9¾"—Holds 40 oz. bloc
De Luxe 2¾" x 2¾" x 8" — " 25 or 16 oz. bloc
Aerzonette 3½" x 1½" x 1½"— " 4 oz. bloc
Can be supplied plain or with your nameplate.



• LIQUID SOAP DISPENSERS

The famous "SOAPERIOR" line. Strong, attractive leak-proof dispensers carrying a two years' guarantee against defect in material or workmanship.

Push-in Valve type (illustrated) and Push-up Individual Dispensers—Gravity Feed Equipment. Portable and Wall type Dispensers for Hospitals. Made in our own shops of top-notch materials. Yet priced surprisingly low.

• DISINFECTANTS

Of Pine Oil containing 70% pure steam-distilled pine oil (Disinfectant—germicide—cleaner and deodorant in one)—also lower cost Pine Disinfectants and Deodorants. Coal-tar Disinfectants ranging from high-cofficient 18-20 to low-priced products made to sell at a price. Liquid and Powder Chlorine Disinfectants. Each batch tested and germicidal strength guaranteed.

• LIQUID TOILET SOAPS

Concentrated 42% Soaps made of finest edible Cochin Cocoanut Oil or Olive Oil—bland, neutral, absolutely pure and free of fillers or adulterants. Also Prepared Soaps to meet any specifications. Special soaps for Industrial and Surgical use and pure Castile Infants Soap for hospitals.

• SOAP AND SHAMPOO BASES

Made from special blends of Cocoanut or Olive Oil—concentrated to 65% soap solids—producing more soap per pound than average base and making fine bland generous-lathering soaps.

• POLISHES

High-grade Metal Polishes which remove tarnish but do not scratch or blemish brass, silver, copper, etc. Fine quick-drying Furniture Polishes. Non-inflammable and easy to apply.

• FLOOR SURFACING MATERIALS

Mopping Varnishes—Quick-drying rubless Waxes—Floor Sealers, etc. Special finishes for linoleum, terrazzo, tile, cork, slate, marble, concrete, travertine, magnesite, quarry, rubber, rubber tile, soft asphalt and bitumen floors. Let us solve your special floor problem.

• LIQUID SCRUBBING SOAPS

A type for every floor—to meet any price requirement. Safe, neutral cleaners for fine wood, tile, marble, linoleum, cork, rubber, rubber tile, terrazzo, travertine floors. Approved by leading manufacturers for fine flooring as well as for Furniture, Wainscoting, Painted, Enameled and Varnished Surfaces.

• INSECTICIDES—MOTHICIDES

High - powered but non - poisonous stainless and odorless fly sprays meeting the Insecticide and Disinfectant Manufacturers' standard. Also Concentrated Fly Spray (may be diluted with 19 parts petroleum oil to make 20 gals. full strength spray).

Ready - to - sell Insecticides—Specifics for Bedbugs—Mothicides—Larvaecides—Mill and Weevil Sprays.

BUILD BUSINESS UNDER YOUR PRIVATE LABEL

• SEND FOR SPECIAL PRICE BULLETIN quoting a "new low" in prices. With this line you can meet any price competition. Any product can be supplied without our name—packed under your private label.

U. S. SANITARY SPECIALTIES CORPORATION

433-41 So. Western Avenue, Chicago, Illinois

Say you saw it in SOAP!

COAL TAR DISINFECTANTS

DISINFECTANTS

COAL TAR DISINFECTANT
(*Coefficients 2-20*)

TAR ACID OILS

CRESOL COMPOUNDS
(*Liq. Cresolis Compositus U.S.P. Cresol Compound Technical*)

ANIMAL DIPS

CATTLE SPRAYS

CRESOL U. S. P.

CRESYLIC ACID

LIGHT OIL DISTILLATES
(*Benzol, Toluol, Xylol, Solvent Naphtha*)

WOOD PRESERVATIVES

AGRICULTURAL CHEMICALS
(*Ammonium Sulphate Flotation Sulphurs*)

NAPHTHALENE
(*Crude and Refined . . . All Kinds . . . Moth Balls . . . Flakes*

With unexcelled facilities for producing our own raw materials and for compounding and testing them in our own plants and laboratories, we guarantee Dependable Disinfectants of both soluble and emulsifiable types. Our soluble disinfectants form clear, pale solutions and our emulsifiable ones form rich, milky solutions, free from deposit when diluted with water. Our Frozen Tar Acid Oils (10% to 40% strength), properly compounded, yield white-emulsion disinfectants free from naphthalene deposits. Samples, prices and full information furnished gladly on request.

DISINFECTANT AND DISINFECTANT MANUFACTURERS I&D MA ASSOCIATION

These products can be bought by the can or carload . . . put up as your own brand . . . or shipped in bulk.

KOPPERS PRODUCTS CO.
PROVIDENCE PITTSBURGH CHICAGO
BIRMINGHAM SAN FRANCISCO, 274 Brannan Street
THE WHITE TAR COMPANY
KEARNY, NEW JERSEY
Subsidiaries of The Koppers Company

Say you saw it in SOAP!

van Ameringen-

Perfumes for Insecticides

For insecticides made with pyrethrum and kerosene, we suggest using one to six drams of any of the following oils in one gallon of finished spray.

Orange Blossom No. 96	$4.00 lb.	Rose No. 12	$2.00
Orange Flower No. 11	3.00	Lilac No. 1	3.50
Orange Flower No. 12	2.00	Lilac No. 2	3.00
Cedar No. 11	2.00	Lilac No. 3	2.50
Cedar No. 12	1.00	Lilac No. 4	1.10
Jasmin No. 11	2.50	Lilacine No. 11	1.10
Jasmin No. 12	1.50	Vanilla Bouquet for Spray	3.00
Lavender No. 135	1.00	Bouquet No. 118	1.50
New Mown Hay No. 11	3.75	Bouquet No. 11	3.00
New Mown Hay No. 12	1.50	Bouquet No. 12	2.00
New Mown Hay No. 13	2.00	Spray Odor No. 195	4.80
Oriental	1.50	Spray Odor No. 353	4.50
Narcissus	2.25	Spray Odor No. 457	3.75
Violet No. 11	3.00	Spray Odor No. 276	3.00
Violet No. 12	1.75	Spray Odor No. 259	2.00
Mint No. 11	1.50	Spray Odor No. 11	5.50
Mint No. 12	1.00	Spray Odor No. 12	5.00
Honeysuckle No. 11	3.25	Spray Odor D. No. 5	5.25
Honeysuckle No. 12	3.00	Spray Odor No. 23	4.50
Rose No. 11	2.25	Tuberose	4.25

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Colors	*Odors*	
Amber	Bouquet—many bouquets to choose from, state type wanted.	
Blue		
Chypre green	Cedar	Orange
Light green	Hay	Oriental
Rose	Jasmin	Peppermint
Violet	Lilac	Pine
Yellow	Lily	Rose
	Narcissus	Violet

Grade A—any of the above odors with or without color $2.50 lb.

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INSECTICIDE AND DISINFECTANT SECTION

A Department of SOAP

SOAP is official publication of *The National Assn. of Insecticide and Disinfectant Manufacturers.*

The Association Meets

ON December 12 and 13, the National Association of Insecticide and Disinfectant manufacturers will hold its nineteenth annual meeting at the Hotel New Yorker in New York. If past meetings are any criterion, the annual meeting this year will see close to 250 representatives of the manufacturing insecticide, disinfectant, liquid soap, and allied industries in attendance at the sessions of the Association. A program combining discussion of some of the latest scientific topics with a discussion of business matters such as sales, discounts, credits, packaging, trade practices, is close to completion.

This is one year when the manufacturers of insecticides and disinfectants must look the condition of their businesses square in the face. It is one year when many of the policies of the industry must be subjected to the acid test of open discussion. You owe it to your business this year of all years to attend the meeting. Plan to arrive at the New Yorker on Sunday, December 11. Important discussions will not be confined to the regular sessions. But, come what may, be on hand for the opening session, Monday, December 12, at 9:00 A. M.

—o—

That the past season has been one of the poorest ones in the household insecticide field, is quite generally admitted. Most manufacturers in the business lost money. Very few, if any, made money. We grant that nobody feels very happy over what we have just passed through. That, however, is past. The 1933 season is still ahead. With any kind of a break, a lot more insecticide can be sold next year. As far as possible, let's forget 1932. A concentration on ways and means for 1933 will do more toward paying off back debts and increasing revenue than a continued viewing with sorrow the late lamented season of 1932.

—o—

What is a Floor Wax?

THE complaint of the Federal Trade Commission against the manufacturer of a well-known water-emulsion type floor wax, charging improper labeling of the product, becomes in our opinion, about the last word in official hair-splitting. Although the charges in the complaint have unquestionably been refuted successfully by the manufacturer, the Commission will probably continue to press its case as usual. From the very beginning, the Commission has revealed a gross ignorance of trade practice and new developments in the wax field. A water-emulsion floor wax, irrespective of other products which it may contain, is just as true a liquid wax in every sense of the word as a solution of wax in an organic solvent. Other manufacturers who

(*Turn to Page* 103)

National Assn. of Insecticide *and* Disinfectant Manufacturers

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William Peterman, Inc., New York

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Merck & Co., Rahway, N. J.

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Membership

Active—Open to manufacturers and wholesale distributors of disinfectants, germicides, deodorants, insecticides, liquid soaps, polishes, and allied products. Dues—$75.00 per year.

Associate—Open to firms supplying raw materials, containers, equipment, etc., to the membership. Dues—$50.00 per year.

For further details, communicate with

NATIONAL ASSOCIATION OF INSECTICIDE & DISINFECTANT MANUFACTURERS
Harry W. Cole, Secretary
HOLBROOK MASS.

Notes of the Trade

Rochester Germicide Co., Rochester, N. Y., manufacturers of sanitary products, have developed a new fan type deodorizer which is being marketed as the Air-O-San Device. The deodorizing block is held in a container in front of the fan and vaporizes rapidly when the current is turned on.

—o—

Channell, Ltd., manufacturers of sanitary products, has made an assignment of its assets to O. E. Lennon, Official Receiver. The first meeting of creditors was held in Toronto, October 28th. Notice of the meeting was sent out by George A. Touche & Company, 67 Yonge St., Toronto, accountants.

—o—

Miracul Wax Co., St. Louis, manufacturers of *Dri-Brite* liquid floor wax, are completing a campaign designed to give impetus to fall purchases. Space in 25 papers in 21 cities, six magazines and four business papers was included in the campaign.

—o—

Seacoast Laboratories, New York, have completed a factory at Sea Bright, N. J., for the manufacture of pyrethrum and derris extracts, according to an announcement from Wayne Cadwallader, president of the company. Both oil and water soluble extracts are being manufactured.

—o—

Dethol Manufacturing Co., Newark, N. J., have appointed N. W. Ayer & Son as advertising counselers. Newspapers and magazines will be used.

—o—

Continental Car-Na-Var Corp., Brazil, Ind., have developed a product for removing oil from floors. The new material, Absorb-X, is stated to act as a poultice in drawing out the oil.

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U. S. Sanitary Specialties Corp., Chicago, announces three additions to their line of liquid soap dispensers. One is for hospital soap, another for baby soap in maternity wards and the third a new tilting type model.

—o—

Pepsodent Co. announces the appointment of Will de Grouchy as promotion manager. Mr. de Grouchy was promotion manager for Curtis Publishing Co. for ten years, later art director of the *Ladies Home Journal.*

—o—

Crystal Soap & Chemical Co., Philadelphia, manufacturers of soaps and sanitary specialties for the jobbing trade, have added a non-polishing floor wax to their line.

—o—

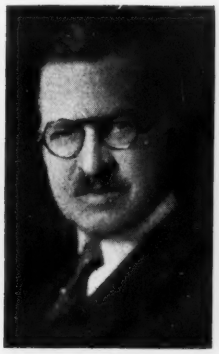
Skat-A-Rat Corp., Providence, R. I., have appointed Lanpher & Schonfarber to direct their newspaper and radio advertising campaign.

Insecticide and Disinfectant Meeting in N. Y. Dec. 12-13

Evans E. A. Stone
President
William Peterman, Inc.

Harry W. Cole
Secretary
Baird & McGuire, Inc.

John Powell
Treasurer
John Powell & Co.



Peter Dougan
1st Vice-President
Merck & Co.

S. H. Bell
2nd Vice-President
Koppers Products Co.

TENTATIVE plans for the program of speakers and events for the Nineteenth Annual Meeting of the National Association of Insecticide and Disinfectant Manufacturers, to be held at the Hotel New Yorker, New York, on December 12 and 13, have been made. According to Harry W. Cole, secretary of the Association and chairman of the general convention committee, four business sessions will be held during the two days of the meeting with group luncheons each day and the annual informal banquet on the evening of Tuesday, December 13. A meeting of the Board of Governors will be held at the hotel on Sunday, December 11, the day preceding the regular meeting, at 7:00 P. M. as in previous years. Registration fee, including tickets for the luncheons and the banquet will be fifteen dollars per person as in other years, according to Mr. Cole. Regular business sessions will be closed except to active and associate members or those holding special cards of invitation.

The program of speakers and discussions will be a broad one this year and will cover both technical and business phases of the insecticide, disinfectant, and sanitary specialty industries, according to Walter J. Andree of Sinclair Refining Co., chairman of the program committee. Among the speakers as tentatively arranged, the program calls for an address from Lee Bristol of the Bristol-Myers Co., New York, well-known authority on merchandising and marketing, on "Budgets and Profits." Mr. Bristol is author of the book, "Profits in Advance." A paper will be read by Dr. Aldred Weed of John Powell & Co., New York, on "Uniform Terminology for Insecticides," covering the subject of standardization of phraseology in the insecticide industry. An address by Dr. Edward Bocker, chief of the Drug Inspection Division of the New York City Department of Health, and author of the recently adopted code covering fumigation and extermination in New York, under the title of "Safety in the Use of Insecticides" has been scheduled.

As part of the work of the Committee on Insecticide Standardization, N. J. Gothard of Sinclair Refining Co., East Chicago, Ind., will read a paper on "Standardizing the Spray Nozzle for the Peet Grady Test," covering work on the proposed standardization of the atomizer for test purposes. "New Development in Disinfectants in 1932" will be the subject of an address by Dr. Emil Klarmann, chief chemist for Lehn & Fink, Inc., Bloomfield, N. J.

The program committee is attempting to arrange a symposium of speakers on the subject of "Selling Through Jobbers versus Selling Direct." Two speakers who are scheduled for this symposium thus far are Henry A. Nelson of the Chemical Supply Co., Cleveland, and C. C. Baird of Baird & McGuire, Inc., Holbrook, Mass. In the field of sales, there will also be a discussion of the proposed efforts to secure accurate sales data from manufacturers in the insecticide and disinfectant industry through a committee of the Association. A proposed questionnaire covering this subject will be brought up during the discussion.

The proposed amendment to the Insecticide Act of 1910, or as a separate law, will also be discussed. This discussion will be led by Peter Dougan of Merck & Co. The original proposed change in the law called for a compulsory labelling of disinfectants and allied products with a phenol coefficient.

There will be several papers on the commercial side of insecticide manufacture and sales. Proposed addresses include one by Wallace Thomas of the Gulf Refining Co., Pittsburgh, on "Off-Brand Competition in Insecticide Sales." F. O. Huckins of Toledo Rex Spray Co., Toledo, is scheduled to talk on "Consigned and Guaranteed Stocks." A paper on "Broadening of the Insecticide Market,—With Especial Attention to Use Against Bed Bugs, Moths, and Roaches" will be read. The name of the speaker in this case has not been announced.

On Tuesday, December 13, at the morning session, the nominating committee for 1933 officers will be elected. They will report back and the election will be held at the closing session on Tuesday afternoon. The annual informal banquet will close the convention on Tuesday evening. Grant A. Dorland is in charge of the entertainment and announces that a floor show comprising ten acts will be included at the dinner.

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Opportunities for Export

The following opportunities for export of American soaps and allied products have come to the Bureau of Foreign and Domestic Commerce, Washington, D. C. American manufacturers can secure the full details of the inquiries by communicating with the Bureau, care of the Department of Commerce. Be sure to mention the number of Foreign Trade Opportunity in writing.

*1456	Raw materials for soap manufacture	Bulgaria	Agency
†1495	Laundry soap in bars and powder form	Canada	Agency or Purchase
*1624	Shaving and toilet soaps	Netherland West Indies	Agency or Purchase
†1626	Insecticides	Canada	Agency
†1653	Laundry and dry cleaning chemicals	India	Agency
†1778	Textile soaps	Netherlands	Agency or Purchase
†1784	Toilet preparations	Norway	Agency

—o—

The Mellon Institute of Industrial Research has announced the renewal of the Robert Gair fellowship for research on moisture-proofing and grease-proofing paperboards for cartons and boxes. One of the results of the work done over the past year has been the development of a new adhesive for joining difficult-to-paste materials.

—o—

Exports of liquid household insecticides from United States during September, 1932, totaled 143,602 lbs., worth $40,370, paste and powder exports totaling 14,980 lbs., worth $4,732. In September 1931, exports of both types totaled 514,067 lbs., priced at $143,707.

—o—

United States exported 150,433 lbs. of household disinfectants deodorants, germicides and similar preparations in September, 1932, shipments being valued at $13,867. Figures for September, 1931, were 144,237 lbs., worth $17,632.

Wilson Joins Guarantee Exterminating

Coincident with an expansion of activities and a change in name and office location, Dr. E. D. Wilson, formerly of the American Cyanamid & Chemical Co., has become associated with the Guarantee Exterminating Co., New York, as executive vice-president and general manager. Dr. Wilson was for a number of years in charge of insecticide and fumigant sales for American Cyanamid. Guarantee Exterminating Co. has been reincorporated under the name of Guaranteed Sanitation, Inc., and has taken a suite of offices at 500 Fifth Ave., New York, in which it will be located after Dec. 1. S. S. Rosen, who established the company twenty years ago, remains as president. E. F. Watson is treasurer.

—o—

Insecticide Act Fines $1,615

Fines totaling $1,615 were imposed during the fiscal year ended June 30 last in 15 federal court cases involving violation of the Insecticide Act, according to the annual report of Solicitor Elton L. Marshall, of the Department of Agriculture. The fines were divided as follows: $490 in 1 case, $300 in each of 2 cases, $200 in 1 case, $50 in each of 2 cases, and $25 in each of 9 cases.

Altogether 44 cases were reported to the Attorney General during the fiscal year, in 20 of which, involving 30 violations, criminal proceedings were recommended. The remaining 24 cases were civil or seizure cases, brought against products alleged to be adulterated or misbranded. At the beginning of the fiscal year, 19 cases were pending, 16 of which were criminal cases and 3 civil or seizure.

—o—

J. Frederick Palmer, president of Palmer Products, Inc., Waukesha, Wis., manufacturers of sanitary specialties, spent part of last month hunting moose in Canada. He was fortunate in bringing down an excellent specimen, the head of which has been mounted and added to the collection of hunting trophies on exhibition in his office. Mr. Palmer had a long shot at a second moose but was too far away to allow the shot to take effect.

—o—

"When eyes approve, . . . then minds react . . . and hands respond" is the cover caption on an unusually startling and attractive folder recently issued by the Anchor Cap & Closure Corp., Long Island City, N. Y. The folder analyzes the purchasing stimuli and concludes that first on the list is package attractiveness or eye appeal. Without the initial eye appeal, there is no mind reaction of attractiveness or desire to purchase. Copies may be secured by communicating with the company.

—o—

Wilson & Bennett Mfg. Co., Chicago, manufacturers of steel containers, are now making lithographed metal signs.

Disinfectant, Antiseptic, and Related Definitions

By Dr. AUSTIN M. PATTERSON
Antioch College, Yellow Springs, O.

THE use of technical and semitechnical words in commerce has increased rapidly with the development of research and the growth of advertising. The modern market affords an amazing variety of articles, the manufacture, merits, and use of which are discussed in a voluminous literature. It is desirable that the scientific terms employed should convey clear meanings to all concerned, or at least not give a wrong understanding. Words do not always have one simple sense. A language is a living, growing organism, and its words take on color, gain fresh content, acquire new senses and lose old ones as the years pass. It is the task of the dictionary worker to discover and set forth the present meanings of words in the light of their history.

In this article definitions and comments are presented for the following terms: antiseptic, bactericidal, bactericide, deodorant, deodorize, disinfect, disinfectant, disinfection, disinfest, germicidal, germicide, insecticidal, insecticide, prophylactic, sterilization, and sterilize.

The conclusions are based chiefly on a study of the more widely disseminated literature in English, especially reference books both scientific and general, but also on conversations and correspondence with physicians, bacteriologists, government officials, manufacturers of chemicals, and laymen.

The investigation into the meaning of various words in common use in the disinfectant and associated industries was undertaken by Dr. Patterson, well-known lexicographer, with the aid of a grant from the National Association of Insecticide & Disinfectant Manufacturers. The report, given herewith, was also published in the *American Journal of Public Health*. It is reproduced here as part of the official published record of the Association.—The Editors.

Germicide, -dal

Definitions—

germicide, n. Anything that destroys germs (microorganisms); applied especially to agents that kill disease germs.

germicidal, adj. Destroying germs; pertaining to germicides.

Comments—The word *germ*, in the sense of microorganism, is a popular one, but it has been used in forming the convenient terms *germicide* and *germicidal*, which find extensive use in technical as well as popular literature. There seems to be little disagreement as to the meaning of these terms: a substance is a germicide if it will kill germs and whether or not it will do so can be experimentally determined. As the words are ordinarily used, the germs referred to are those of disease. The chief point of controversy that could arise is with reference to differences in resistance. In practice it is assumed that a substance represented as a germicide, when used as directed, will kill all ordinary disease germs, but is not necessarily required to be capable of destroying bacterial spores. In combating diseases such as anthrax or tetanus, caused by spore-forming bacteria, germicides or procedures specially effective against spores will be required.

Bactericide, -dal

Definitions—

bactericide, n. Anything that destroys bacteria.

bactericidal, adj. Destroying bacteria; pertaining to bactericides.

Comments—These terms are synonymous in large part with *germicide* and *germicidal*, the chief difference being that the two latter are somewhat broader, inasmuch as they may include microorganisms other than bacteria. *Bactericide* is a precise term applying only to bacteria and to bacteria of all kinds; in practice, however, it is ordinarily regarded in the same light as *germicide* with respect to the resistance of different bacteria; that is, a substance, in order to be called a bactericide, is not necessarily required to be capable of destroying bacterial spores.

Antiseptic

Definitions—

antiseptic, n. A substance that opposes sepsis, putrefaction or decay; one that prevents or arrests the growth or action of microorganisms, either by inhibiting their activity or by destroying them; used especially of agents applied to living tissue.

antiseptic, adj. 1. Having the properties of an antiseptic; opposing sepsis, putrefaction or decay; preventing or arresting the growth or action of microorganisms, especially on or in living tissue. 2. Pertaining to, or characterized by, the use of antiseptics; as *antiseptic* surgery.

Comments—The word *antiseptic* is derived from two Greek words, *anti*, against, and *septikos*, putrefactive or rotting. The first known use of it in English, both as an adjective and as a noun, is (according to the *Oxford English Dictionary*) in the *Gentleman's Magazine* in 1751, where sea salt, myrrh and acids are spoken of as antiseptics. In 1774 Priestley remarked on the antiseptic power of "nitrous air" (nitrous oxide). At the time that the word came into existence it was not understood that putrefaction and decay are produced by the agency of microorganisms, but when this became known, the "preventing or arresting the growth or action of microorganisms" took its place naturally in the idea conveyed by the word. Apparently the earliest use of the term was with reference to substances to be applied as medicaments to sores and wounds, and the principal use even today is of substances applied to some part of the body, either externally or internally. The word *antiseptic* might be, and has been, applied to substances used to prevent decay in other connections, as of foods or timber, but such materials are usually called *preservatives* rather than antiseptics. It will be noticed that, as "antiseptic" is used, it may imply long-continued contact.

Antiseptic and Germicide—Since the killing of microorganisms is the most effective way to prevent their growth it would

seem a logical conclusion that any germicide may act as an antiseptic. This appears to be the prevailing view. A great many writers who discuss the matter state or imply that an antiseptic may act either by inhibiting the growth of microorganisms or by killing them. A smaller number, however, limit the action of an antiseptic to the prevention or arresting of bacterial growth *without* killing the organisms.

Now it is quite natural that, since we have other words such as *germicide* and *bactericide* to denote agents which actually kill microorganisms, the idea that an antiseptic may arrest growth without killing should be emphasized; but the majority of writers do not go so far as to contrast *antiseptic* with *germicide* and to regard the two terms as mutually exclusive. It seems best in accord with the history of the word and with prevailing usage to apply the term *antiseptic* to any agent which prevents further bacterial action, whether it does so by killing the bacteria or not. If this view be taken, any germicide might theoretically serve as an antiseptic. In practice there are exceptions. The action of certain non-material agencies, as sunlight and heat, is often referred to as germicidal but not as antiseptic. Again, many germicides cannot be used as antiseptics because of their harmful effect upon the body tissues. Bearing such exceptions in mind, however, we may say that in general a germicide is an antiseptic or has antiseptic properties.

On the other hand, it is not correct to say that an antiseptic is necessarily a germicide or has germicidal properties, for there are substances which are able to arrest the growth of microorganisms but are not germicides. Here again usage is not unanimous, for certain writers, chiefly those influenced by the practice of antiseptic surgery introduced by Lister, regard the action of antiseptics as a destroying one.

In an investigation of the relative number of authorities supporting each point of view, 165 definitions of *antiseptic* were studied, ranging in date from 1819 to 1930. Twenty, mostly early, make no reference to bacteria. Of the remainder, 66 state or imply that antiseptics arrest or destroy microorganisms, 27 state that they arrest but do not destroy, 12 that they destroy, and 10 that they inhibit growth (without stating how). Most of the remaining 30 definitions are not entirely clear, though a few represent divergent views, for example, that antiseptics neutralize toxins.

To illustrate recent usage on this point, 53 citations from works published in 1921 or later may be summarized as follows: (1) Describing an antiseptic as inhibiting or preventing the growth of microorganisms without necessarily killing them, 37. Of these, 12 are from bacteriological, 11 from medical, and 14 from miscellaneous sources. Three say definitely that antiseptics do not kill bacteria and 4 more distinguish between antiseptic action as non-killing and disinfectant action as killing; the rest either say or imply that antiseptics may kill or else do not mention the question. (2) Stating that antiseptics destroy bacteria, 6. Of these, 2 are from surgeons, 1 is from a chemical dictionary which quotes alcohol and boric acid as examples, and 1 considers the "inhibiting" sense preferable. (3). Not giving a clear issue, or controversial, 10.

It should be remembered that whether a given substance is a germicide or an antiseptic, or neither, depends on several factors. One is the *strength* in which the agent is used; it may be a germicide in a solution of a certain concentration and only an inhibiting agent at a lower concentration. The *time of contact* and *mode of application* must also be taken into account; a solution which is germicidal when in contact with the material for 30 minutes may not be so for an exposure of 5 minutes, and imperfect contact of course lessens effectiveness. The *nature of the microorganism* must also be considered, since the resistance of different kinds varies greatly, so that a substance might be germicidal for one variety and only inhibitory toward another, within a definite range of concentration. And there are still other factors, such as the *temperature*, the *abundance of the microorganisms* and the *nature of the material* in which the microorganisms are found.

Disinfect, -tant, -tion

Definitions—

disinfectant, n. An agent that frees from infection; usually, a chemical agent which destroys disease germs or other harmful microorganisms (but not, ordinarily, bacterial spores); commonly used of substances applied to inanimate objects.

disinfectant, adj. Freeing from infection, especially by destroying disease germs or other harmful microorganisms.

disinfect, v.t. To free from infection, especially by destroying disease germs or other harmful microorganisms.

disinfection, n. The act or process of disinfecting.

Comments—The verb *disinfect* first appears in the literature at about the beginning of the 17th century, and the other forms much later. Like *antiseptic*, this group of words came into use before the germ theory of disease originated. It was believed that certain "effluvia" existed in the air and on furniture, clothing, etc., and communicated certain diseases; hence, the infection must either be removed or destroyed. It is now recognized that the infection is caused by microorganisms, but we continue to use *disinfectant* as a convenient term for any agent that accomplishes the result of freeing from infection.

Wilcox (*Pharmacology and Therapeutics*, ed. 7, p. 13) states that "the term *disinfectant*, by extension, is applied to those agents which kill non-pathogenic bacteria, as well as to those which destroy disease germs." This, it seems, involves an extension of the meaning of the word "disinfection" to include freeing from other undesirable microorganisms besides those causing human disease.

Disinfectant and Germicide—For some time after the advent of the germ theory of disease, authors hesitated to describe the action of a disinfectant as being wholly or principally the destruction of microorganisms. They spoke of "restraining" or "neutralizing" the germs, of destroying the poisons produced, of deodorizing, etc. It would seem that their idea of "ridding of infection" was clear but not the precise method by which disinfectants operate. Popularly this vagueness persisted much longer. Albert Buck (*Reference Handbook of the Medical Sciences*, 1894) says: "Popularly, the term *disinfection* is used in a much broader sense. Any chemical agent which destroys or masks bad odors, or which arrests putrefactive decomposition, is spoken of as a *disinfectant* . . . This popular use of the term has led to much misapprehension." This misapprehension seems to have decreased with the spread of scientific knowledge.

Of 143 definitions of "disinfectants," dating from 1854 to 1930, 25 (chiefly of earlier dates) make no reference to microorganisms. Of the remainder, 95 define disinfectants as germ destroyers, 9 state that they may also act by removing the germs, and 8 say that they either destroy germs or arrest their action. Of the 95 citations, 52 define disinfectants as destroyers of *disease* germs, 34 merely say that they destroy germs or are germicides, while 9 specifically state that they destroy all germs, non-pathogenic as well as pathogenic.

Hence it seems to be generally expected that any substance used as a disinfectant will destroy the cause of infection, that is, will act as a germicide.

The word *disinfectant* still carries with it much of its original connotation. It suggests the cleaning of sick rooms, clothing, bedding, lavatories, stables and in fact of any places or things that might harbor disease. By contrast, *germicide* is a precise, colorless word, conveying its literal meaning and little more. Aside from their history and connotations, however, *disinfectant* and *germicide* appear today to have the same meaning when applied to substances used in fighting disease.

Disinfectant and Antiseptic—If we accept certain conclusions from the above discussion, namely, that the substances called disinfectants are germicides, and also that in general germicides may act as antiseptics but that antiseptics are not necessarily germicides, then it follows that disinfectants may (theoretically at least) act as antiseptics, but that antiseptics may not necessarily act as disinfectants. Due attention should of course be paid to the different connections in which the two words are used.

Sterilize, -zation

Definitions—

sterilize, v.t. To render sterile, that is, free from all living microorganisms.

sterilization, n. The act or process of sterilizing, or freeing from all living microorganisms.

Comments—These are exact terms, which came into use (in the sense under discussion) to express a precise idea, namely, the freeing of a material, container, or space from living microorganisms of all kinds. There is no distinction between disease germs and other germs, or between resistant and nonresistant varieties or forms. If a thing has been treated in such a way that no growths can be produced from it by appropriate culture, then—and then only—has it been completely *sterilized*.

One of the best ways to accomplish sterilization is maintaining for a sufficient time at a temperature at which microorganisms cannot live; hence the use of the word *sterilize* suggests to some the destruction of microorganisms by *heating*. To others it includes also the notion of the use of strong chemical agents. The word calls to mind the treatment of surgeons' instruments, gauze bandages, culture dishes, and other apparatus rather than the treatment of the sick room or of the human body.

Disinfect and Sterilize—It has been noted that *disinfect* refers particularly to the destruction of disease germs (especially the vegetative forms), while *sterilize* denotes the freeing from all organic life. Hence *sterilize* is the more drastic of the two terms and it might easily happen that something is thoroughly disinfected without being completely sterilized. This is true, for example, of the customary treatment of milk cans, milk bottles, etc., in the dairy industry, where treatment sufficient to prevent diseases and spoiling of the milk is not necessarily sterilization.

Deodorant, -rizer

Definition—

deodorant, deodorizer, n. Anything that destroys or masks offensive odors.

Comments—A deodorant may or may not be an antiseptic or disinfectant. The popular notion that danger from infection disappears with the removal of disagreeable odor is of course a mistaken one.

Insecticide, -dal

Definitions—

insecticide, n. A substance that destroys insects, especially a preparation used for this purpose.

insecticidal, adj. Of or pertaining to insecticides; destroying insects.

Comments—As defined, the word *insecticide* is limited to the destruction of insects. The Insecticide Act of 1910 defines it somewhat more broadly, however, as "any substance or mixture of substances intended to be used for preventing, destroying, repelling, or mitigating any insects." Also, the Food and Drug Administration admits within the term *insect* small invertebrate animals such as spiders and mites which do not belong to the order Insecta but are liable to be called insects in popular language. Insecticides may be effective against one type of insect but not necessarily against all types of insects. Insecticides usually act as stomachic or respiratory poisons; their method of application or use varies with the type of the insecticide and of the insect against which it is applied. An insecticide although used to destroy insects does not necessarily give a 100 per cent kill.

Disinfest

Definition—

disinfest, v.t. To rid of infestation; to free from infesting insects, rodents or other small animals.

Comments—The earliest appearance of the word of which the committee has record is in the report of the Committee on Standard Regulations for the Control of Communicable Diseases, A. P. H. A., 1926, in which the following definition appears: "By disinfesting is meant any process, such as the use of dry or moist heat, gaseous agents, poisoned food, trapping etc., by which insects and animals known to be capable of conveying or transmitting infection may be destroyed."

Since a word covering the above process was apparently needed, and since the inclusion of this sense in the meaning of *disinfect* (as has been the practice of some) seems incorrect and undesirable, the introduction and use of the comparatively new word *disinfest* are to be commended.

Prophylactic

Definitions—

prophylactic, n. Anything that prevents, or that contributes to the prevention of, disease; a preventive.

prophylactic, adj. Guarding from disease; preventing, or contributing to the prevention of, disease.

Comments—The meaning of *prophylactic* is wide. It applies to anything which even helps to ward off disease, as fresh air, nutritous diet, and rest, which serve as preventives of tuberculosis and other ailments. One writer has even used the term "mental prophylactics." Various medicinal preparations are also called prophylactics. It would seem, however, that a substance, to be called a prophylactic against a given disease, should be demonstrated to have some efficacy for the purpose in question under the conditions of its intended use.

Conclusion

It has been announced as a principle of legal practice that "language used in the label is to be given the meaning ordinarily conveyed by it to those to whom it is addressed." This commends itself as a sound and wise ruling, for the general public cannot be expected to be acquainted with special technical meanings or to have information proper to experts alone. Nevertheless, it is possible to draw wrong conclusions from this principle. People constantly make use of words of which they do not know the accurate meaning. They know barely enough about it for ordinary purposes; the rest they leave to the specialist. This is eminently true of such things as drugs and medicaments. It is small wonder that similar terms are sometimes confused in the popular mind.

It may of course happen in the development of language that a term becomes so confused that it undergoes a complete change of meaning and that the new meaning becomes commonly accepted. But the mere fact that the average person has a confused notion of a word which is used correctly by writers and careful speakers does not justify acceptance of the confused meaning.

The terms *antiseptic* and *disinfectant* may be taken as examples. There appears to be some haziness in the mind of the public regarding their signification; yet the greater part of the literature is in fair agreement as to the derivation, history, and present meaning of the two words. Moreover, what popular confusion may exist is not so much with respect to the *root idea* of the words ("antiseptic," opposing decomposition; "disinfectant," ridding of infection) as regarding the mechanism by which the result is effected (removing germs, killing germs, or preventing the growth of germs). It is the result that chiefly concerns the public; the expert must be relied on for exact knowledge of the mechanism.

So far as the writer can determine after talking with various persons, bacteriologists, physicians, druggists, manufacturers of chemicals, and government officials, there do not seem to be serious differences of opinion among professional men as to the meanings of the various terms now under discussion.

Insofar as differences exist, they seem to relate rather to the question as to what is a fair use of the terms in connection with certain manufactured products, when the circumstances under which these products are to be used are duly considered. For example, there seems to be pretty general agreement that the term *antiseptic* (at least aside from surgery) may properly be applied to a substance which merely arrests the growth of microorganisms without killing them. There is apparently no question, for example, as to advertising a bandage impregnated with iodoform as an antiseptic dressing for wounds or as to calling iodoform or any similar agent an antiseptic when so used. The question seems to be whether a substance which is not a germicide but which acts as an antiseptic so long as it remains in contact with the area to be protected can fairly be called an

(*Turn to Page* 105)

The Original Fly Spray Perfumes

BOUQUET No. 77

Produces a very fine lilac like odor in all fly sprays in which kerosene or petroleum distillate is used as a base. Only one ounce necessary to perfume one gallon of spray. Guaranteed not to stain.

BLEND No. 7

For those who desire a lower priced product which still possesses the features which have made Bouquet No. 77 extremely popular.

Both Bouquet No. 77 and Blend No. 7

are odors from which you can make sprays suitable for use anywhere. Especially recommended for use where food products are stored, sold or used.

On request we will send an interesting leaflet fully describing perfumes for deodorizing crystals or blocks, fly sprays and theatre sprays. Samples of these products will be furnished on application.

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12 East 12th Street New York

"IT'S THE ODOR THAT SELLS THE PRODUCT"

Say you saw it in SOAP!

The Safety Factor In Exterminating Products

With Reference to Pyrethrum and Red Squill

By Dr. Edward Bocker*

THE consideration by public health officials of products used in the extermination of insects and rodents is always from the angle of the well-being of the general public. Public health authorities do not restrict the use of this or that product unless they have very good reasons for doing so. In most restrictive regulations, the efficacy of any product is not considered at all, the public health being the chief and only consideration. The health authority is the agency of city or state which must protect the public against products or practices that are dangerous to health, but which may not be generally known to be dangerous by the public. Knowing that the public health officer bears constantly a grave responsibility is sufficient reason why manufacturers should not view too critically the imposition of restrictive regulations which may affect his products.

Because of the very nature of the work, the extermination of insect life calls for the use under some conditions of dangerous poisonous substances. It is one of the duties of health officers to surround the use of these products with as great a degree of safety as is possible and to forbid the use of poisonous materials where it is difficult or impossible to use them safely. These are the reasons behind the adoption early this year of new regulations governing the extermination of insects and rodents in the City of New York, and for requiring the licensing, after an examination to determine fitness, of all persons engaged in extermination and fumigation work.

Among the regulations on extermination is one covering the use of poisonous insecticides or rodenticides in or about premises where foodstuffs are prepared, handled, stored, or offered for sale. The reasons for this are quite obvious. Irrespective of the care with which the poisons might be handled, experience has taught us that there is always the possibility of contamination of foods. Cases of poisoning from sodium fluoride have been fairly common, poisoning from other substances used against roaches, ants, etc. less common. Accidental poisonings have been chiefly from contamination in bakeries, and in restaurant and hotel kitchens. Most frequently, the poisonous insecticide has been used by mistake for baking powder, baking soda, powdered sugar, or some other food product. In New York City, this danger has been eliminated to a great extent by the adoption of the standard nile blue tinted sodium fluoride. This colored fluoride is now required for all extermination work and in all packaged insecticides where fluoride is used. The white fluoride is forbiddcn. This is a practical method of surrounding the product with a safeguard.

THE regulations which forbid the use of any poisonous substance in places where foods are prepared or handled are designed as an additional safety measure. With the poisonous substances barred out, the question arises,—what products are left which an exterminator can use, or which can be used as the active principle in packaged insecticides or rodenticides? We must admit that few effective products remain. Chief among these are pyrethrum or insect powder for insecticide use, and red squills for rats.

Pyrethum is a small flower of the daisy family which is grown commercially in Japan and Dalmatia. The flowers are picked and dried and shipped to the United States in compressed bales. They are ground or milled to a very fine powder which is used in this form as an insecticide. In this connection, it is interesting to note that the term "insect powder" means powdered pyrethrum flowers, and nothing else. This is the definition which is given to "insect powder" by the United States Department of Agriculture, and it is a violation of the federal law to label any other insecticide with this title. "Insect powder" is not just any powdered insecticide, but pyrethrum alone. As soon as anything else is mixed with pyrethrum powder, it can no longer be designated as "insect powder."

The main difference between pyrethrum and most other products used as insecticides is the non-poisonous character of pyrethrum. It is this characteristic which gives it a wide latitude in use. For extermination work in and around kitchens, pantries, refrigerators, bakeries, restaurants, soda fountains, and in factories where foodstuffs are prepared or stored, it is the product to be recommended. As an insecticide in the powdered form, it is effective against roaches, ants, and other crawling insects. If it is accidentally eaten by children or domestic animals, there are no bad effects. If foods be-

* Dr. Bocker is Chief of the Division of Drug Inspection of the New York City Department of Health. (See also Storage and Handling of Cyanide Fumigants, *Soap*, Aug., 1932, p. 83.)

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KEREX CHERIE

KEREX SWEET

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They COVER *Kerosene*

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Say you saw it in SOAP!

come contaminated with it, no harm is done as it has little or no taste or odor, and is not poisonous to persons or animals.

In certain types of extermination work, powdered pyrethrum is not suitable, so the flowers are then extracted with petroleum to produce the ordinary "fly spray" or liquid insecticide. This type of liquid is used by some exterminators against flying insects, especially in moth control, and in some cases against bed bugs and various beetles. These liquid sprays likewise have the advantage of being non-poisonous to humans or animals. In certain work against bed bugs, they are safer and to be preferred to the carbolic and other poisonous solutions used. Sometimes, the pyrethrum liquids are used in bad infestations of roaches or ants as a preliminary treatment before spreading around the powder or prior to applying it with a blower.

While the subject of safety in extermination work is up for discussion, it is interesting to note how pyrethrum can be non-poisonous to humans and still kill insects. According to those who have engaged in research with the product, the actual killing is done by a small percentage content of two organic esters, called pyrethrin I and pyrethrin II. The content of these esters seldom reaches one per cent and is usually less than this. The small proportion, however, is sufficient to act directly on the breathing equipment of the insects as the powder or liquid mist is taken in through the air passages in the sides, to cause a paralysis of the breathing muscles and suffocation of the insect.

NOW, we come to the question of safety in rat extermination. The product which has come to the fore rapidly during the past few years and which has the recommendation of the United States Department of Agriculture behind it, is red squill. This is the bulb of a plant which grows chiefly in Sicily and Malta. It resembles very much the ordinary red onion. This bulb is dried and pulverized, and in this form, mixed with various baits, is used against rats. It is also made up into certain liquid products which are made by extracting the bulb.

Much research has been done by the Department of Agriculture in determining that red squill is not poisonous to humans or to animals outside of rodents. Although squill does contain a poisonous glucoside called *Xanthoscillid*, it acts also as a powerful emetic. If it is taken into the stomach of a person, dog, or cat, it is immediately vomited up. In rodents, it is retained in the stomach and acts as an effective poison. The safety factor is the chief reason why it is to be preferred to arsenic, thallium, barium, or strychnine.

Because of the growing consciousness among public health officials in all parts of the country to the danger involved in the use of poisonous materials in ordinary exterminating, there is a likelihood that regulatory measures restricting their use will become the rule in large cities and in the more thickly populated states. The United States Public Health Service is now engaged in a study of the safety factors involved in commercial extermination work. The health departments of several large American cities are now studying the new regulations which are in force in New York, with a view perhaps of adopting similar changes in their codes. The trend is toward the safer exterminating products and away from those which are dangerous. Country-wide restrictions may not be far distant. With this in mind, it would appear that it might be distinctly to the advantage of the commercial exterminator and to the manufacturer of packaged insecticide products to give more thought to and gain greater experience in the use of the less dangerous products.

—o—

Solutions of sulfur dioxide in organic solvents with the exception of alcohol may be used alone or in admixture with inert substances or other active ingredient as insecticides. Cyclohexanone is mentioned as a suitable organic solvent. Trichloroethylene, glycol or cyclohexanol may also be used. The inert substances may be talc, bole or carbon. I. G. Farbenindustrie A.G., Frankfurt-am-Main, Germany. German Patent No. 540,563, filed January 13, 1928.

—o—

A bis (hydroxyarl) ether or amine or alkylamine, such as bis (dichloro-4-hydroxyphenyl) ether is mixed with a suitable solid, semi-solid or liquid vehicle or carrier such as talc, soap, glycerin, wool fat, petrolatum, wax, alcohols, etc. The mixtures may be used as disinfectants, fungicides, insecticides, polishing compositions and the like. I. G. Farbenindustrie A.G., Frankfurt-am-Main, Germany. British Patent No. 358,508, filed June 24, 1930.

—o—

Stockholders of Continental Can Co. will meet November 22nd to vote on changing the present outstanding 1,733,345 no par shares of the company to $20 par value. From the capital surplus of $28,583,003 thus created it is proposed to appropriate $6,000,000 to add to the depreciation reserve. Another appropriation of $1,004,252 will be made to adjust to the $20 par value 31,201 shares of company stock held in the treasury.

—o—

Japanese insecticides have been giving American products increasing competition in the Cuban market, according to a report from U. S. Consul H. B. Quarton, Havana. In recent years American insecticides have dominated the Cuban market almost to the point of exclusion of other imports.

—o—

United States exported 130,631 lbs. of household disinfectants, deodorants, germicides, etc., during August, 1932, the value being $10,803. Similar totals for 1931 were 222,458 lbs., worth $20,168.

—o—

Zonite Products Corp. reports net profit of $523,251 for the nine months ended September, 1932. Third quarter net was $132,075.

HOPKINS' PYRETHRUM PRODUCTS

Standardized - Concentrated

KILL BIOLOGICALLY TESTED

We hope our present and prospective customers will not hesitate to call upon us for any information regarding our Pyrethrum Products. A qualified Entomologist is in charge of our Entomological Laboratory and all testing of Pyrethrum Products is carried on, under his personal supervision, by the Peet-Grady and Richardson methods.

Our Analytical Department, where the qualities of Hopkins' REDRATSQUIL, DERRIS PRODUCTS, and other insecticidal materials are scientifically determined, is in charge of our Chief Chemist.

These two Scientific Departments are at your disposal in any way you can be assisted.

J. L. HOPKINS & CO., Importers . . Millers . . Distributors
220 Broadway, New York

for 34 years

Makers of
Coal Tar Disinfectants
Stock Dips
Pine Oil Disinfectants
Insecticides
Polishes
Cleansers
Liquid Soaps
Spray Products
Roofing Cements

for the Wholesale and Jobbing Trades Only

INSECTICIDES

Prepare for the fall and winter business on household insecticides for use against bed bugs, roaches, silverfish, etc. Here are four products of unusual interest to the jobber and distributor at this season.

LIQUID INSECTICIDE
Sure death to bed bugs and roaches. Will not stain. Non-explosive.

PHENOL INSECTICIDE
Low cost. For use in rooming houses, jails, etc. Powerful.

PERFUMED INSECTICIDE
Especially for hotels, apartments, etc. Odor pleasant. Results sure.

ROACH POWDER
Effective 100% against ants, roaches, etc. Best obtainable.

Also best quality Fly Spray for immediate needs.

Send for samples, prices, etc., and a copy of our new folder containing full information.

CHEMICAL SUPPLY COMPANY
2450 Canal Road **Cleveland, O.**
Established 1898

Say you saw it in SOAP!

Baltimore to License Fumigators

Under a new proposed addition to the ordinances of the City of Baltimore, licenses will be required of persons engaged in the business of fumigating with hydrocyanic acid and other dangerous gases and fumes used in the extermination of rodents, insects, and other pests. In the use of hydrocyanic acid gas, a warning gas to be designated by the Commissioner of Health, will have to be used to the extent of 30 per cent. New regulations covering fumigating work are also proposed covering notification of the Health Department, Fire Department and local Police Station. Notification of occupants is also covered and a watchman required on fumigating jobs. A bond covering liability insurance of $10,000 is required for all fumigating firms before a license can be issued. The license fee is placed at $10.00 for each firm. Application must be accompanied by a sworn statement covering experience. Examinations are to be given by a board appointed by the Commissioner of Health.

—o—

Arthur Srebren, formerly with Sherwood Petroleum Co. and Standard Aromatics Co. in Chicago, has become associated with Murray & Nickell Mfg. Co., Chicago, drug millers. He will concentrate his activities in the pyrethrum department. Murray & Nickell, established 67 years ago, have their own plant at Elgin, Ill., for the milling of flowers and percolation of extracts.

McCormick Heads Mayonnaise Assn.

Charles P. McCormick, McCormick & Co., Baltimore, was elected president of the Mayonnaise Manufacturers' Association at the seventh annual convention held in Boston, October 24, 25 and 26. The election took place on the evening of October 25 in connection with the annual banquet. Other officers chosen to serve with Mr. McCormick include: vice-president, Charles A. Nehlig, Blue Plate Foods, Inc.; secretary, G. C. Pounds, Kraft-Phoenix Cheese Corp.; and treasurer, Jay Gould, Best Foods, Inc. Mr. McCormick is a member of the National Association of Insecticide and Disinfectant Manufacturers, representing McCormick & Co., Baltimore, and has long been active in the affairs of the latter group.

C. P. McCormick

—o—

Exterminators licensed in New York City up to Nov. 1 under the new Board of Health Regulations have numbered 503, with 116 licenses for fumigating being issued. Of these totals, 152 licenses were for owner-operators of exterminating businesses and 351 employes, 35 owner-operators of fumigating organizations and 81 employes.

"SERRID" PRODUCTS of DERRIS ROOT

POWDERED DERRIS ROOT
For agricultural dusts, roach and flea powders, etc. Sold on a content basis. Air floated.

LIQUID EXTRACT CONCENTRATED
For agricultural, garden and hothouse sprays. Standardized content, in various solvents.

DERRIS RESINATE
A light brown powder containing 25% Rotenone and 75% Derris Resins. For agricultural sprays, etc.

ROTENONE—70%, 90%, C.P.
Fine dry crystals for mothproofing, colorless sprays, and technical work, etc.

OPTONE
A fragrant, colorless liquid extract for fly sprays, and mothproofing.

DOUBLE X
A combination Rotenone-Pyrethrum concentrate. For fly sprays. High kill guaranteed. Standardized in content and kill.

SUPER AGRICULTURAL SPRAY
A finished concentrated liquid plant spray furnished to the trade in bulk for repackaging. Highly effective against mealy bug and red spider. Tested and proven.

We solicit enquiries regarding Derris Root powder, its extracts, and its uses.

DERRIS, Inc.

79 WALL STREET **NEW YORK CITY**

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FOR YOUR PROTECTION—

The primary purpose of The Entomological Testing Laboratories, Inc., is to make available to the insecticide manufacturer and bulk insecticide buyer a testing service devoted wholly to insecticides.

Entomological testing by the Peet-Grady method and complete chemical examination of insecticides are now available.

We invite the cooperation of manufacturers and buyers to make this laboratory a useful adjunct of the insecticide industry.

Charges are moderate, and our completely equipped and expertly directed Laboratory is at your disposal.

ENTOMOLOGICAL TESTING LABORATORIES, INC.
114 E. 32nd Street New York, N. Y.

The Effective Insecticide

Quick — Positive — Safe

The average user of insecticides demands two things —quick action and certain death. Insect annoyance must be stopped promptly and permanently.

LETHANE 384

acts with surprising speed and with absolute certainty. It will pay you to use Lethane 384 as the active component of your insecticide.

Röhm & Haas Co., Inc.

222 West Washington Square
Philadelphia Pennsylvania

Say you saw it in SOAP!

McCormick & Co. Founder Dies

Willoughby M. McCormick, founder and president of McCormick & Co., Baltimore, died unexpectedly of heart disease at the New York offices of the company, the afternoon of November 4. Mr. McCormick was sixty-eight years old and had been prominent in Baltimore business, civic and religious activities for over forty years. The McCormick organization, started in 1889 in a one-room shop, is now housed in a nine-story building and employs 600 workers. Associated with Mr. McCormick in the management of the company have been his two nephews, Charles P. and Hugh P. McCormick, both vice-presidents of the company.

W. M. McCormick

—o—

Manufacturing members of the Federal Wholesale Druggists' Association, at the seventeenth annual meeting of that body held at the Raleigh Hotel, Washington, October 4-6, formed an organization of their own to operate as a part of the F. W. D. A. organization. S. B. Penick, head of S. B. Penick & Co., New York, presided at the separate sessions of the manufacturers which resulted in the formation of a permanent body headed by P. C. Magnus, Magnus, Mabee & Reynard, Inc., New York.

—o—

The date for the Fourteenth Exposition of Chemical Industries has been definitely set for December 4, 1933, according to a recent announcement by Charles F. Roth, manager. Plans for the exposition have been under way for some time, and it was originally planned to have the event early in 1933. The new dates will allow exhibitors more time to plan and prepare their exhibits, and possibly more latitude in their plans through coming at a time when more generous outlay, both of time and money, on exhibits may seem more justified.

—o—

Rubber is proposed as an ingredient of cleansing compositions for removing grease from hands. Thus an aqueous emulsion of rubber or similar material is mixed with an aqueous suspension of a light abrasive such as pumice, French chalk or talc to form a friable coagulum. Coloring substances, antiseptics, etc., may also be added. Dunlop Rubber Co., Ltd. British Patent No. 358,584, filed July 12, 1930.

—o—

Amerika-Interessen, Inc., Chrysler Bldg., New York, has been organized to arrange interchange of patents between United States and German manufacturers. Among the German patents now on file is one for a plant insecticide.

LIQUID SOAP PERFUMES

Odor does help sell soap. Increase the sale of yours by the use of Perfumes that sell on smell and hold that interest to the extent that repeat business is assured.

We Suggest:

Oil Colonial Bouquet	$6.00 lb.
Oil Rose "N"	4.00 "
Oil Cosmo Bouquet	6.00 "
Oil Lilas Blanc	4.50 "
Oil Tipton Bouquet	1.85 "
Oil Palma Bouquet	3.50 "

One pound to four to five hundred pounds of liquid soap is ample. Send for sample.

MAGNUS, MABEE & REYNARD, INC.

ESSENTIAL OILS

AROMATIC CHEMICALS
PERFUME SPECIALTIES

32 CLIFF ST.,
NEW YORK, N. Y.

the new standard shipping and pouring package for

LIQUID SOAPS
DISINFECTANTS
REMEDIES
SPRAYS

The POR-PAIL

The combination steel shipping and pouring drum that has been so widely adopted by manufacturers of soaps, sprays and sanitary products. It ships without boxing or crating, guarantees liquid-tight security at all times and gives the customer a more convenient and useful container. Pouring is very accurate, smooth and steady, entirely eliminating choking, gushing and dripping. When drained, cover is pried off so that the empty pail may be used. There's a great advertising tie-up in this utility feature if the pail is attractively and durably lithographed. Request prices for the black enamel, solid color or lithographed finish.

WILSON & BENNETT MFG. CO.

General Offices
6528 S. Menard Ave.
CHICAGO

Eastern Division
455 Third St.
Jersey City, N. J.

Southern Division
2119 Poland St.
New Orleans, La.

Steel Pails and Drums 1 to 65 Gallons

The SPRAYER
Comes FIRST

It makes no difference how effective the insecticide or repellant may be, it MUST be correctly applied if the results are to be the BEST. The better the sprayer, the better the customer will like the product. That is the rule.

Acme Makes Sprayers to Fit Every Requirement

Over fifty years in the business has eliminated all risk and experiment in ACME products. The very height of perfection has been attained. Every sprayer carries a money-back guarantee of satisfaction. If it isn't in our regular line, we can build a sprayer to fit YOUR needs.

Our No. 200 sprayer is a leader. Special drip cup feature; air and spray tubes coordinated to produce a mist or fog that hangs in the air longer; special processed leather plunger, etc., etc. Tell us your needs. Write for samples and prices.

Potato Implement Company, Dept. 34
TRAVERSE CITY, MICHIGAN

J. W. Ellis, founder and president of the Chemical Supply Co., Cleveland, with Mrs. Ellis, photographed on a recent trip to Mirror Lake, Yosemite Park. Mr. Ellis

founded the Chemical Supply Co. in 1898 to manufacture disinfectants and sanitary products for the jobbing trade only. This policy is still in force with the company. Mr. Ellis continues as president of the company and keeps in active touch with its affairs, although active management is in the hands of Henry A. Nelson, vice-president and general manager. Mr. and Mrs. Ellis travel many miles in the course of the year. Travel, with fishing, are their hobbies.

—o—

Lambert Company reports net income of $3,207,827 for the first nine months of 1932, comparing with $5,361,317 in the same period of 1931. Third quarter net was $639,442, as against $1,147,609 in the previous quarter and $1,788,787 in the third quarter of 1931.

—o—

Patterson Foundry & Machine Co., East Liverpool, Ohio, has issued a four-page folder describing the Patterson "Typhoon" portable mixer. Sizes and specifications for both the direct drive and geared drive model are given.

—o—

What Is a Floor Wax?

(*From Page* 87)

have scrupulously avoided labeling their wax-emulsions with the word "wax" since this complaint was issued, need a little stiffening in their backbones. If this suit is fought to a finish, the Commission must lose for the facts are all against its case.

Presto Model 102 Spray Gun

Presto 102 Electric Spray Gun

throws a ten foot cloud of penetrating mist—

INSECTICIDES and disinfectants correctly applied with the Presto spray gun are many times as effective and much more economical than the same material applied by old-fashioned methods. Give your customers this added advantage of proper methods of application and increase the sale of your product.

Presto spray equipment has proved a definite sales stimulant, especially effective with large users of insecticides, moth killers, deodorants, disinfectants and similar products.

Presto model 102 electric spray gun is the ideal equipment for correctly applying materials of this kind. The complete unit weighs only 3¾ lbs., is convenient and easy to handle, and gets maximum effect out of the material sprayed. This unit throws a penetrating, finely atomized mist a distance of ten feet—and is furnished complete, ready to operate by plugging into any convenient electric light socket.

Presto model 88-94 shoulder strap spraying unit is particularly adapted to industrial use and for dairies, packing houses, and anywhere that large areas and efficient, economical application is necessary.

Presto Model 88-94 Shoulder Strap Electric Spraying Unit

Find out how Presto spray guns can help the sale of your products. Send the coupon now.

METAL SPECIALTIES MFG. CO.
3200 Carroll Ave., at Kedzie Ave., Chicago, Ill.
Send full details of Presto spray gun features and sales plans.

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*Address*_____

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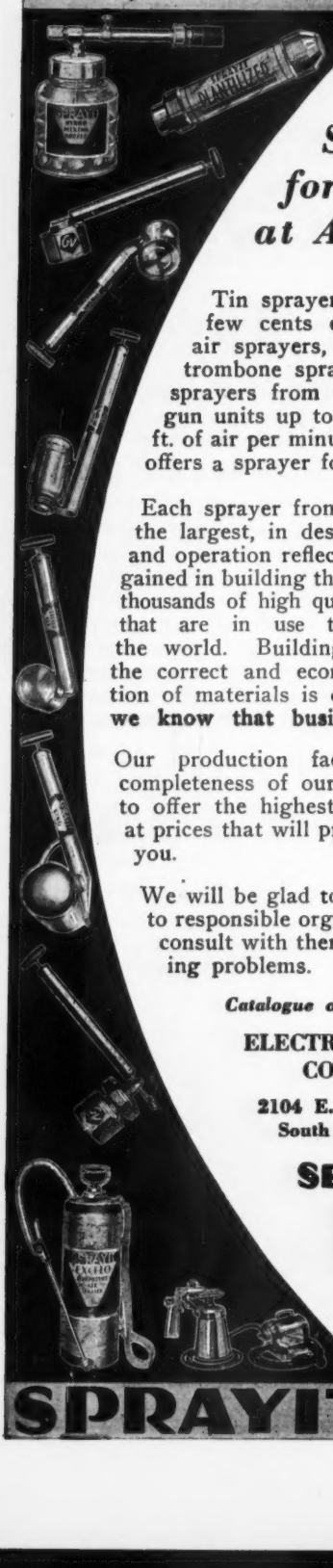
Say you saw it in SOAP!

COMPLETE LINE of SPRAYING EQUIPMENT



There's a SPRAYIT for Any Need at Any Price

Tin sprayers that sell for a few cents each, compressed air sprayers, bucket sprayers, trombone sprayers, electric sprayers from the smallest cup gun units up to outfits of 10 cu. ft. of air per minute. Only Sprayit offers a sprayer for every purpose.

Each sprayer from the smallest to the largest, in design, construction and operation reflects the experience gained in building the thousands upon thousands of high quality SPRAYITS that are in use throughout the world. Building equipment for the correct and economical atomization of materials is our business and **we know that business thoroughly.**

Our production facilities and the completeness of our line enables us to offer the highest quality sprayer at prices that will prove attractive to you.

We will be glad to submit samples to responsible organizations and to consult with them on their spraying problems.

Catalogue on request

ELECTRIC SPRAYIT COMPANY

2104 E. Colfax Ave., South Bend, Ind.

SEND FOR NEW 32 CATALOG

SPRAYIT

ELKO

COLORODORS *for* Para and Naphthalene

. . . . . new low prices!

Lower cost raw materials have resulted in lower prices for the famous ELKO COLORODORS—also in increased strength. They are concentrated combined Perfume and Color bases, especially prepared for use in paradichlorbenzene and naphthalene products. They are absolutely soluble insuring uniformity.

For Deodorant Crystals: Mix only one-quarter ounce of COLORODOR for each pound of paradichlorbenzene or naphthalene. To each pound of perfumed and colored crystals, mix one-eighth ounce of light magnesium carbonate to prevent caking.

For Deodorant Blocks: Add one-quarter ounce of COLORODOR to the pound of paradichlorbenzene or naphthalene. The material can then either be pressed or melted and moulded as desired.

SERIES P. D. 1
for high quality products
$4.50 pint $32.00 gal.

SERIES P. D. 2
for popular priced products
$2.25 pint $16.00 gal.

SERIES P. D. 3
for chain store products
$1.50 pint $8.00 gal.

COLORODORS are available in a wide variety of color and odor combinations. Let us know what odor you would like to test, also the series in which you are interested.

E. M. LANING CO.

INCORPORATED

Main Office and Laboratories: **433 Stuyvesant Ave.**
IRVINGTON NEW JERSEY
Phone: ESsex 2—8433
New York Office 130 Pearl Street

Dri-Brite Refutes F. T. C. Complaint

A complaint against Miracul Wax Co., St. Louis, was made public October 27 by the Federal Trade Commission, the Commission charging the makers of "Dri-Brite Liquid Wax" with improperly labeling their product as a wax. The commission describes the product as a floor polish which is not a true liquid wax but a "liquid containing in solution about 15 per cent of solids, among which, in substantial quantities, are various substances other than wax." The complaint continues that "liquid wax for the purpose of application to floors is commercially and popularly known as a product composed solely of wax in solution with some solvent, which, upon evaporation after being applied to the floor or other surface, leaves a film of pure wax." Dri-Brite is alleged not to leave a film of pure wax nor one like that left by liquid wax.

In its answer the Miracul Wax Company denies that its product is a floor polish and disputes the commission's analysis of its contents insisting that it is a true liquid wax as that term is used in the trade, but that it is made by a new and better process. The answer challenges the power of the Federal Trade Commission to "define arbitrary words, phrases and terms and to establish such definitions as standards for the labeling and advertising of goods."

—o—

Exports of liquid household insecticides from United States during August, 1932, totaled 125,760 lbs., worth $37,493, shipments of powdered and paste products amounting to 26,686 lbs., worth $6,795. In August, 1931, 514,025 lbs. of insecticides of both types were exported, their value being $153,479.

—o—

Parke, Davis & Co., Detroit, have appointed Young & Rubicam as advertising counsel, effective Jan. 1, 1933.

—o—

Disinfectant Definitions

(*From Page* 93)

antiseptic when its application is necessarily brief as in the case of a mouth wash, gargle or tooth paste. Again, the agreement on the meaning of the term *prophylactic* seems to be good. It is recognized as a very broad term. Apparently the main question at issue, if there is one, is under what circumstances a given substance may fairly be claimed to have a prophylactic effect.

The adjustment of such questions as to what is fair under different circumstances seems to lie outside the province of defining meanings of words. It seems to be a matter of bacteriological and medical knowledge, a spirit of fair play, and good common sense. If the writer may hazard a suggestion, it would be that, since the correct application of certain terms of which *antiseptic* and *disinfectant* may serve as types depends on a number of factors (in the present case, strength, time of contact, type of organism, etc.), due regard should always be had to these factors as they occur, or are likely to occur, in actual practice.

REILLY
Coal Tar PRODUCTS
Carbon PRODUCTS
Chemicals

CRESYLIC ACID
CRESOL
CRESOL U. S. P.
XYLENOL
TAR ACID OILS

-- and other
Coal Tar Chemicals for the

SOAP and
DISINFECTANT
INDUSTRY

REILLY
CHEMICAL CO., Inc.
Merchants Bank Bldg.
INDIANAPOLIS

Say you saw it in SOAP!

CIN-MADE CONTAINERS

Makers of all kinds of insecticides, cleansers, soap powders, deodorants, paradichlorbenzine blocks and crystals, and many other similar products use CIN-MADE cylindrical fibre containers. From a wide variety of styles, sizes and colors there is a CIN-MADE container to meet your individual requirement. A large stock of all standard sizes is always carried in stock enabling us to offer 24 hours' service on rush orders. Prompt service on special sizes.

A FEW CIN-MADE STARS

1. Single holders for para blocks. **2.** Special single holder with diamond cut holes and duo finish. **3.** Multi-type container for para blocks. **4.** Revolving nickeloid sifter cover. **5.** Aluminum pour-out spout type. **6.** Non-neck style—semi-perforated screw cap. **7.** Tin slip-on cover—semi-perforated. Samples and prices on request

THE CIN-MADE CORPORATION FORMERLY THE CINCINNATI MAILING DEVICE CO.
294 EGGLESTON AVENUE CINCINNATI, OHIO

VOGEL

A substantially constructed sprayer that will stand up under hard usage, priced at a remarkably low figure.

SPRAYERS

Regular hand type, also continuous. Sturdy, well designed. The greatest value for your money in sprayers.

CANS

Standard stock sizes for liquid insecticides and disinfectants. Plain or lithographed. A gross or a carload. The standard insecticide container.

Deodorizing Block Holders
Shaker Top Cans for Para

Plain stock types or specially lithographed

WILLIAM VOGEL & BROS., Inc.
37-47 South 9th St. Brooklyn, N. Y.

Say you saw it in SOAP!

Dethol Co. Plans Expansion

David P. Smith, president of Dethol Manufacturing Co., Baltimore, in a statement made public October 15, announced plans for the enlargement of the company's business. The program includes financial reorganization, increase and modernization of manufacturing facilities, chemical research to achieve a better product, addition of companion products, extension of markets, and an expanded merchandising and advertising campaign. The company manufactures "Dethol," one of the well-known nationally advertised liquid insecticides. A production plant, equipped with new machinery, has been relocated in Newark, N. J. Chemical research laboratories are in New York.

—o—

Pyrethrum Mosquito Larvicide

A stock mosquito larvicide for use in place of crude oil or fuel oil is suggested by Dr. J. M. Ginsburg, biochemist in entomology at the New Jersey Agricultural Experiment Station at New Brunswick, N. J. After outlining the advantages of a pyrethrum-kerosene emulsion over the regular petroleum products, Dr. Ginsburg gives the following method for making the preparation: "About 4 or 5 ounces of soft soap, such as potassium oleate or coconut fatty acid soap, are dissolved in one gallon of water. The solution is then transferred to a container provided with an agitator and mixed for a short time or until appreciable foaming takes place. If no mechanical agitator is available, an ordinary bucket pump can be used. Two gallons of kerosene extract of pyrethrum are gradually poured in while the agitator is continuously working. After all of the kerosene has been added, the mixing is continued for 5 minutes or longer. The emulsion is then allowed to settle until the foam disappears and is kept as stock larvicide."

—o—

Hercules Powder Co., Wilmington, Del., has issued a folder describing its new pale wood rosins. Complete specifications for the new products are given, also suggestions as to how they may be utilized. Incidentally, the technical folders issued from time to time by Hercules have received unusual notice in that their series on nitrocellulose was selected as one of the fifty outstanding mail campaigns of the year.

—o—

A manufacturer of a vermin exterminator has agreed to discontinue representing that cats and dogs will not eat the exterminator and that it will mummify the carcasses of rats and mice, thus preventing offensive odors, when such are not the facts.

—o—

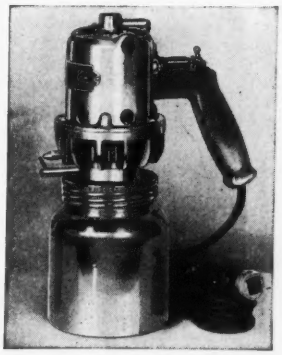
Dodge & Olcott Co., New York, has issued a price list and catalogue, giving prices and specifications on its essential oils, aromatic chemicals, etc., as of December, 1932.

Increase The Sale Of Your Products With Breuer's TORNADO Electric Sprayers

You can increase the sale of your insecticides by supplying your customers with the proper method of application.

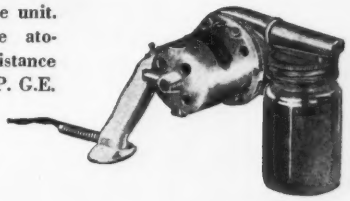
TORNADO Electric Sprayers lead the field. Thousands in use. New developments and improvements in design and construction place TORNADO Sprayers far in advance of out-of-date methods, insuring satisfactory application and encouraging the more frequent use of your product.

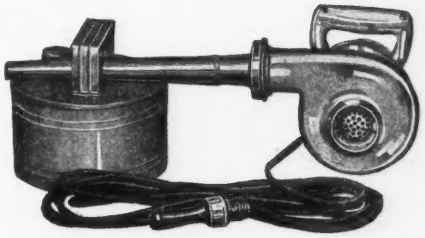
There is no line so complete or that embodies so many exclusive and modern features of sprayer design and operation. Three models—see illustrations and descriptions below.



Model 53 new Compressor Type unit. Will break insecticide into *finest* mist and gas formation mechanically obtainable. Floats throughout spraying area for many minutes—a truly de luxe model! ⅛ H.P. G.E. Universal Motor. 1 quart metal container. 20′ of rubber covered cable.

Model 50 Fan Type unit. A fine insecticide atomizer. Sprays distance of 8′ to 10′. ⅛ H.P. G.E. Universal Motor, 1 pint glass jar. 20′ of rubber covered cable.





Model 6 Fan Type unit. Will break insecticide into a very fine mist. Sprays 18′ to 20′. ⅓ H.P. G.E. Universal Motor, Norma Ball Bearings, 1 gallon metal container. This model is for larger institutions, warehouses, industrials, etc., and is also highly recommended for mothproofing solutions.

Write today for complete description and circulars.

BREUER ELECTRIC MFG. CO.
862 Blackhawk St. Chicago, Ill.

Say you saw it in SOAP!

Death to
Rats .. Mice .. Ants
THALLIUM SULFATE
kills!

Manufacturers of insecticides should investigate the possibilities of using this product in their preparations.

Exterminators will find Thallium Sulfate an especially efficient product when used on baits in accordance with our directions.

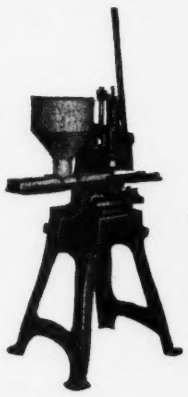
Thallium Sulfate is a white powder —100% tasteless and odorless. Other thallium salts are also available. Packed in 2½ pound bottles and cans and in 50 pound boxes. Get complete information about the merits of Thallium Sulfate now.

ORE & CHEMICAL CORP.
40 RECTOR ST. NEW YORK, N. Y.
BOwling Green 9—5523-24-25

REQUIRE MECHANICAL HELP?

The two practical machines shown here comprise all you need to produce very satisfactory *Paradichlorbenzene Disinfecting Blocks*, or *Moth Repellent Tablets*.

The small machine illustrated is a mixer which will blend colors, perfumes, binders or cheapening ingredients to any batch with the greatest of satisfaction, and the large machine will compress the mixture into blocks and tablets of any shape or form that dies can give.



The mixer is equally usable on dry powders such as roach, pyrethrum or other blending operations. Likewise for shaving, face and other creams, for smoothing, softening and giving that "velvety texture."

The hand lever press has more power than cheap foot lever presses and will produce fine looking blocks very rapidly by any kind of labor, male or female.

Samples, made from your materials, will gladly be submitted. Guaranteed saving of 5% to 10% over hot process.

HUBER MACHINE CO.
259 — 46th St. Brooklyn, N. Y.
Makers of good soap machinery for forty years.

"FILMA-SEAL"
(the double seal of cap and film)

Is used on many nationally known products

Prevents
Evaporation—Leakage—Tampering

Send us a few of your packages, glass or tin, to "FILMA-SEAL" and we will prove its advantages to you.

FERDINAND GUTMANN & CO.
Bush Terminal No. 19 Brooklyn, N. Y.
Trade Marks Reg. Pats. Pending

"HOLZ-EM"
Wax Applicator and Spreader

Makes it easy and convenient to apply and spread all types of floor dressings QUICKLY and EVENLY to all types of floors.

SIMPLE
PRACTICAL
DURABLE
INEXPENSIVE

The sheep wool pads are all first quality skins, specially tanned, with wool clipped to uniform length, insuring uniform application and spreading.
Sheep wool pads are washable and replaceable.
Made in three convenient sizes.
Packed one complete set with long handle in individual carton.
Recommended and sold by leading manufacturers and distributors of floor dressings throughout the country. Write for descriptive literature and prices.

American Standard Mfg. Co.
2509-13 LIME STREET CHICAGO, ILLINOIS

Manufacturers also of:
HOLZ-EM HANDLES
KREBS RAINBOW MOPS } the patented "leave-no-lint"
KREBS MASTERMOPS } mops made of BRAIDED YARN
KREBS CAMELIZED SPONGES
Write for details

Say you saw it in SOAP!